

CONVENTION ISSUE INFORMATION LETTER

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NATIONAL CANNERS ASSOCIATION

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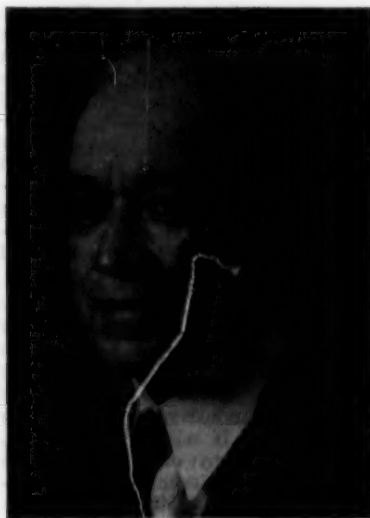
No. 1170

Washington, D. C.

January 28, 1948



HOWARD T. CUMMING
President



JOHN F. MCGOVERN
First Vice President



ALFRED W. EAMES
Second Vice President

Building Strength in the Canning Industry

THE Cannery Panel on Tuesday of the 41st Annual Convention of the National Canners Association, and the character of the addresses delivered at the Opening General Session on Monday, were consistent with the 1948 Convention theme—"Building Strength."

The Panel, entitled "Looking Ahead for 1948," explored conditions affecting various segments of the canned food economy and presented a comprehensive analysis of the problems which probably will confront canners during the remainder of the year.

On the basis that the individual strength of every canner must be such as to prepare him for meeting every eventuality that may occur during the balance of the year, speakers were engaged for both the Panel and the Opening General Sessions whose wide experience and thorough knowl-

edge of their respective fields could be counted on for information of practical value to the individual canner.

At the Opening Session, President Emil Rutz told his audience that full production is the Nation's best safeguard against inflation and called on both capital and labor to cooperate in combating inflation, warning that slowdowns and work stoppages imperil the country's economic stability and endanger the American "way of life."

Citing the canning industry as proof that business can expand and still take on the risks of keener competition, Mr. Rutz said that although canners have increased their production during the past two years, canned foods remain one of the few basic items that have not advanced sharply in price. He declared that canners, in face of ris-

ing costs and indeterminable markets, continue to produce more canned foods than ever before and that such full production has paid off in profits to the industry and lower prices to the consumer.

Mr. Rutz stated that he believes the Taft-Hartley Law to be a realistic approach in correcting the weaknesses of the Wagner Act. "It is my honest opinion," he stated, "that drawn from a wide range of sources, public opinion polls and the like, that the people from the businessman and the laborer, to the men and women in all other walks of life, welcome the long overdue corrections of the Wagner Act through the provision of the Taft-Hartley Law.

"Labor is clearly entitled to two things," he asserted, "bargaining rights and an adequately high standard of living. There is room for both in our economy," he added. "To achieve these conditions, there is need for more understanding and intelligence on the part of both management and labor."

Science and Progress

Speaking on "The Influence of Scientific Research on the Progress of the Food Industry," Dr. Roy C. Newton, vice-president in charge of research of Swift & Company, cited numerous examples of the direct result of scientific research on the production of an adequate food supply, including many of the programs of the Association's Laboratories.

Answering the question: "Where can money be placed to obtain the greatest results in scientific research?" Dr. Newton said that "the first place to spend research money is on the problems which will benefit most the profit-making operations of the company. This may be either the immediate problems facing the company or the long-term problems which will affect the competitive position of the company in future years. There are always such problems in which the company has selfish interests apart from any other industry or any other company within the same industry. I use the expression 'selfish interests' advisedly because it is these interests which continually drive an industrial organization to perfect its products and the efficiency of its operations. It is these interests which force a progressive company to greater and greater public service.

"When the research program in any company is adequate to care for the strictly competitive problems it is then time for the company to undertake cooperative work with other companies within the industry on problems in which there is a common interest. There are many of these problems and fortunately such cooperative action has a long tradition in your Association. Attention should be called, however, to the ever widening use of science in industry. The discoveries of science this year make possible even greater use of science next year in an

accelerating pace of progress. Any company which does not expand its program of research is almost sure to lose ground competitively and any association which does not expand activities in cooperative research will not make the greatest use of its opportunities."

Keep Production Even with Demand

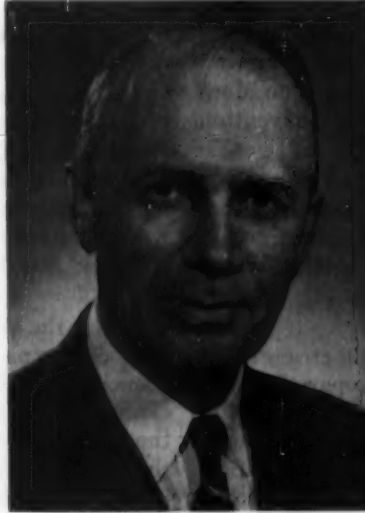
On the subject of "The Impact of European Food Recovery on American Food Production," Dean William I. Myers, of the New York State College of Agriculture, Cornell University, told the canners that while prices for farm products may not decline this year, current high prices will not continue indefinitely. Urging a constructive program of food relief for Europe, Dr. Myers advised food processors to prepare for an ultimate decline in the prices for such foods. Specifically he proposed that processors:

1. Strive to keep production of processed foods in adjustment with probable demand.
2. Make prompt reduction in the prices of processed foods when the prices to farmers are reduced so as to coordinate production and consumption.
3. Strive for greater efficiency in production, processing and distribution.
4. Increase emphasis on production of high quality and,
5. Carry on a vigorous educational program to give producers and consumers the facts concerning food processing and distribution.

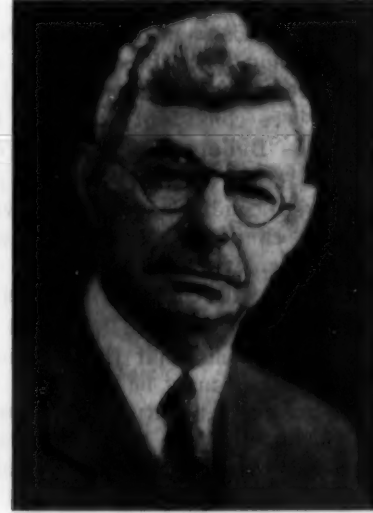
EMIL RUTZ
Chairman, Finance Committee



CARLOS CAMPBELL
Secretary



FRANK E. GORRELL
Treasurer



Production Kapt Prices Down

Arthur H. ("Red") Motley, President of Parade Publication, Inc., in his general comment on the virtues and vices of Government, of Labor and of Management, urged for the latter a policy of full production. He stated that the canning industry has followed such a policy and termed it "the perfect answer to those who want government controls and regimentation. Canners continued to produce," he said, "at increasing volume in anticipation of what proved to be a sustained market—a market bigger than before the war. Prices leveled off and actually declined instead of continuing to rise.

"Canners maintained not only the status quo, but through competition—freedom of choice—they have been able to supply the consumer with a wide range of canned foods. Canned food producers are the one industry with the possible exception of the drug people, where prices have declined—principally because of maintaining competition.

"The average housewife doesn't understand, specifically when shopping, that prices have declined on canned foods. She walks in the grocery store—looks at the piece of meat, and some of the other high cost items—and turns to her neighbor and says, 'Hmph! All food is high!' She says all food prices have increased, but she never takes time to think that a can of corn or a can of peas—or maybe several dozen other canned food items—are not any higher in cost today than they were a year ago—in fact, in most cases they are selling for less money.

"The job canners have done is the very essence of the American free enterprise system—proof that if we produce enough we will develop competition. This job done by canners is important enough to be on the front page of every newspaper in the country and on every radio network. The principle behind this job should be announced to the world—a lot of people packed a lot of peas, and as a result of this production, prices leveled off, the consumer got the food, the farmer got his profit, and the canner made a little money for himself.

"Distributors, wholesalers, and retail grocery stores should emphasize the fact that food items such as canned foods have declined in price. They will be doing this as a favor to themselves as well as to canners.

"I think you canners should be praised for the fine job you have done

on educating the public on the advantages of using canned foods. I want to pay especial tribute to the educational program of N.C.A. This program should be intensified. It is important because it is intelligent selfishness."

(For full reproduction of the addresses of Mr. Rutz, Dr. Newton, Dean Myers and Mr. Motley, see pages 30 to 40, inclusive.)

The Convention Panel

The 1948 Canners' Panel, as was the case last year, constituted a roundup of information, the possession of which should strengthen the individual canner in the planning of his operations during the coming year, from a variety of viewpoints. With Carl N. Lovegren, United States Prod-

Convention Issue

This issue of the INFORMATION LETTER is devoted to reporting the 41st Annual Convention of the National Canners Association, held last week in Atlantic City. It carries not only a running account of the various meetings and occurrences, but reproduces full texts of all the addresses made at the General Sessions and the Raw Products and Fishery Products Conferences. The papers presented at the Canning Problems Conferences will be published shortly in a special supplement to this issue.

The regular Saturday issue date of the LETTER will be resumed February 7.

ucts Corp., presiding as moderator, the audience at the Second General Session heard the following panel speakers:

Howard T. Cumming, President, Curtice Brothers Co., who reviewed the 1947 Panel for which he served as moderator; Henry P. Taylor, President, Taylor & Caldwell, Inc., a canner, whose subject was "The Shift from Seller's to Buyer's Market"; W. H. Eden, vice president, American Stores Company, who presented the distributor's viewpoint under the title, "New Horizons in Food Distribution"; Lester C. Jones, president, New Jersey-Pennsylvania Cooperative Growers Association, on "The Grower's Labor and Other Production Problems"; E. N. Reusswig, Lestrade Brothers, a broker, on "Consumer Buying Trends"; and Robert C.

Paulus, President, Paulus Brothers Packing Company, on "The 1948 Outlook of the Fruit Canner."

Following these presentations, Moderator Lovegren presented a summary of the highlights of the Panel papers and conducted a question-and-answer period in which questions were received from the floor and answered by the Panel members.

In his summary of the Panel, Mr. Lovegren pointed to the value to canners of knowing and analyzing their ability to finance and to warehouse, as was elaborated by one of the canner speakers on the Panel. He briefed the optimistic as well as the pessimistic prospects indicated by the distributor representative; namely, the high level of income and employment as against the tougher competition canned foods will probably receive from perishables, pre-packaged vegetables and meats, frozen foods and other commodities in 1948.

He enumerated the fact, as presented by the grower representative, that the grower as well as the canner, faces increased costs of supplies, material and manpower, but pointed also to the encouragement to be derived from the statement that an adequate supply of material will be produced at a fair price. He stressed the broker's argument that quality is essential and that canners may count on broker support in promotional activities intended to increase consumption of canned foods.

And he reiterated the points made by the fruit canner, especially that canners should think in terms of a production possible to market at reasonable profit rather than how much they can pack, risking possibility of a tremendous loss.

(A complete reproduction of the Panel papers, including Mr. Cumming's review of the 1947 Panel and Mr. Lovegren's Summary of the 1948 Panel, along with background material prepared by the Association's Division of Statistics and distributed in pamphlet form to the Panel audience, is given in the section starting on page 42).

Election of Officers

Following Mr. Rutz' opening address on Monday, Chairman E. N. Richmond of the N.C.A. Nominating Committee, presented the nominations for 1948 officers and directors, and the elections were held. (These are reported on pages 76 and 77.)

At this point, President Rutz called President-elect Cumming to the platform (See *Building Strength*, page 41)

Opening General Session

GREETINGS TO THE 1948 CONVENTION DELEGATES

By Emil Rutz, President, National Canners Association

It is my esteemed privilege to welcome you to the Forty-first Annual Convention of the National Canners Association.

The year 1947 was memorable for the problems it presented and manner of their solution. The sound principles formulated by last year's panel discussions were generally heeded, with the result that some difficulties foreseen and feared at that time did not materialize, and our canning operations were measurably profitable. But expedients of the hour should be continuously distinguished from fixed economic law, unaffected by those expedients. Business experience, over a very long period of time, has brought into universal focus two salients of economic stability: First, that the law of supply and demand determines prices; second, that full production is the best safeguard against inflation.

Our Association sponsors these principles, as demonstrably pertinent to social welfare as they are to industrial efficiency. It is relevant to observe that canned foods is one of the few basic items that has not advanced sharply in price during the past 12 months, thereby lessening the strain on the family budget.

Capital and Labor

Capital and labor is a study in extremes. Management has never proved a "Santa Claus" volunteering wage increases, in genial recognition of human rights. Labor would take over management in the juvenile enthusiasm of a wrecking crew that would wipe out everything. The studied purpose of extremes is for emphasis only. As management once ruled with a high hand, so, latterly labor has felt the heady exhilaration of unrestrained power. Insolence, and power-intoxication are the common denominators; disregard for the public welfare, which both capital and labor are pledged to serve, the common result. Despite this realistic appraisal, it is my honest opinion, drawn from a wide range of sources, public polls, and the like, that, excepting self-seeking agitators, the people, from the business man and the laborer, to men and women in all other walks of life, welcomed the long overdue corrections of the Wagner Act through the provisions of the Taft-Hartley Law. Mere naked power without restraint of moral responsibility resorts to weapons progres-

sively more dictatorial to maintain that power.

Labor is clearly entitled to two things: Bargaining rights, and an adequately high standard of living. There is room for both in our economy—The American Way of Life. In this middle-of-the-road viewpoint, we discern clearly that capital is not a bottomless pit out of which gold is dipped, and labor is not a mere commodity for sale. There is need for more understanding and intelligence on both sides on the basis of human rights, which is the golden tie that binds all together. And less self-seeking on both sides would help a lot. An old Spanish proverb says: "He who would bring home the wealth of the Indies, must carry the wealth of the Indies with him." He who would win increased pay must render a service equal to it in such full production as will enable management to respond in kind. Slowdowns and work stoppages dry up production and harm all alike. Theoretically, every man in Russia should be a common yokel of the soil, with hayseed in his hair, but let there be an intellectual difference between any two of them and the fiction of communism actually ends right there.

By the same token, a fixed high wage rate for beginners and experts alike paralyzes incentive. The right to work is lost in the right to loaf. The human right is lost in a practice to which no human being has a right, whatsoever, namely that of fixing lower levels of efficiency to accommodate inexperience. Of such are the wispy shreds and tatters of communism, as devoid of weight as a summer's cloud. Not so with the solid substance of American labor and management alike, wherein there is no difference in main objectives. The more, then, should we strive to eliminate any artificial cleavage so that our aims and ends, being one, may find unity in a common public service. The alternative is government interference. It takes a lot of ignorance to be indifferent to that. In the wake of industrial strife is unemployment and want, Federal aid, and an expanded bureaucracy.

Federally-Planned Abundance

Every scheme has its advocates, and every gamble its golden promise, like that contained in recent proposals made by the U. S. Department of Agriculture. Behind the gay facade of a Federally-planned abundance and the easy life is a strait jacket built for two—for agriculture and the canning industry.

Did you ever borrow money of a fellow, and note how quickly he made you conscious of your obligation to him? That hints the poison back of wholesale Federal lending. It too easily spills over into Federal management, and you a tenant overseer. No government agency can watch our opportunities in our own fields of endeavor, notably that of research into new markets for the canning industry. Let the Government do any of this for you and you surrender to an expensive futility.

Let's Keep Free

Dr. Everett Dean Martin said, "Men gain liberty when they acquire a voice in the Government; they achieve freedom when they learn how to govern themselves." To maintain and to be worthy of that freedom requires that the canners individually possess and exercise foresight and initiative to explore, at their own expense, all possible outlets for their products. Otherwise we lack the fundamentals necessary to any large measure of success. But there exists no such lack. N.C.A.'s research activities on an industry-wide basis have performed with insight, courage, and intelligence, as a forecast of greater good to come. Let us have faith in the outcome, as well as gratitude for accomplishment. Let's keep free. Let's avoid the entangling allurements of Federal funds made available, at the cost of that freedom, and at a sacrifice of fundamental business principles. Let's keep our hands clean, contribute our own money, earn and deserve the fruits of our own labors. Can any price be too great for this freedom, best calculated to produce quality products to supply a human need?

Our greatest barrier to the larger freedom ahead is our own complacency and indifference to it. Free enterprise is an earned increment, not a gift of benevolence. An ever-stronger N.C.A. is the need to give solidarity and individuality to our national effort. The word "individuality" means a quality incapable of further division. That is the root idea in N.C.A. To endure, it cannot be divided, and to remain a unit of power the members comprising it must stay in line with national policy. They must themselves be individuals of singleness of vision and of undivided loyalty to the sound principles underlying our organization.

Time holds no patent on things of the spirit. Hence, the pertinency of my thanks to the committees of N.C.A. and the staff for their indefatigable industry, courage and cooperation given me during my administration—a splendid performance identified with no particular year, but continuous, unvarying, unaffected by passing allurements that would divide us,

committed rather to a course that keeps us strong, united, free.

One more word, at the conclusion of this convention I come to the termination of a happy year as President of the National Cannery Association, but the person is nothing to the principle involved, for N.C.A. is continuous, a gathering power for good to a major national industry. The day marking my retirement as its

President is but an incident of change, while the unchanging ideals of efficiency and public service move steadily forward. It is with a deep sense of gratitude that I recall the highlights of the past year, in full acknowledgment of all the helpfulness and cooperation from my associates, so largely responsible for whatever small service it has been my very great privilege to render.

THE INFLUENCE OF SCIENTIFIC RESEARCH ON THE PROGRESS OF THE FOOD INDUSTRY

By Roy C. Newton, Vice President
in Charge of Research, Swift
and Company

This is a most fascinating subject for discussion for two reasons: First, because the use of science in the solution of practical problems relating to the every day living of man has reached the stage of universal acceptance. No longer does any intelligent well-read man scoff at the utility of scientific research. This instrument of progress has proven itself so completely and so dramatically during the past quarter century that it has become a popular subject. This acceptance represents a phase of human development that is worthy of note. When the average man, without scientific training, recognizes the potentialities of this relatively new tool as he has in recent years, there is hope that the scientific method may permeate the entire population and become an instrument of social as well as material progress.

Elements of the Scientific Method

We cannot dwell on this thought today, but perhaps just one point is justified. The basic elements of the scientific method are, first, the process of inductive reasoning in which observations and bits of information are fitted together to point to a generalization and, second, the proof or disproof of that generalization by controlled experiment. This scientific method as contrasted to the exclusive use of deductive reasoning from generalities enunciated by some ancient philosopher, without experimental proof, accounts for the difference in our rate of material progress as compared to that in any pre-scientific era. It is not enough for the average citizen to acknowledge the usefulness of this method; it is necessary that the method be absorbed so that it becomes a part of the working mental process of each of us. Even the scientist, when taken out of his professional environment, very often reverts to the level of his species and applies only the deductive process to his prejudices and all of their inherent false premises unchal-

lenged. In my humble opinion, this is the reason that social problems and human understanding have not kept pace with progress in material things.

The second reason I like our subject is that there is such a wealth of material from which to draw for illustration. We must resist the temptation to drift away from our subject and recount the results of research in medicine which has more than doubled the life expectancy of man during the



ROY C. NEWTON
"Research in Food Industry"

past 100 years. There is also a temptation to list the highlights of progress in transportation down through the steamship, the automobile, and the airplane; or in communication through telegraph, telephone, radio, and television; or electric power and lights; or synthetic chemicals with their plastics, textiles, solvents, drugs, and building materials; or the mechanical efficiency of machines which allow 20 per cent of our workers to produce the food and textile raw material that formerly required 80 per cent of our population on the farm. These are all products

of research, but our job today is to chart the progress in the technology of foods as influenced by scientific research.

History of Man's Food

It has occurred to me on previous occasions that there are four eras in the history of man's food. The first was supply for all seasons of the year, and with a reserve for security. The second was palatability; the third, sanitation, and the fourth, nutritive quality. We must draw on our imagination somewhat to picture the struggle of prehistoric man in his battle for food supply. We should lift our hats, however, to the long generations of man which slowly and painfully laid the foundation for the three basic methods of food procurement—the invention of hunting equipment, the domestication of animals, and the cultivation of cereal grains and fruit. We go almost as far back for three of the four methods of preservation which provided man the security of adequate food from season to season and through years of scarcity. The first of these is lower temperatures as in freezing or chilling. The second is drying, and the third is salting or pickling. These all come to us out of the obscure past. Only canning, which involves hermetically sealing the food product, followed by the destruction of spoilage organisms and enzymes, can be claimed as an innovation by modern man.

The story of perfection of these methods of procurement and preservation is the chapter which was written by our fathers in the latter half of the 19th Century, and more particularly by our contemporaries.

Work of Nicolas Appert

The important work of Nicolas Appert in his empirical development of the canning process comes just at the beginning of the 19th Century and thus marks a changing point in the whole philosophy of man with respect to food supply and food preservation.

In the book of sanitation and nutritive quality, our distant ancestors played no significant part. We came into the generation of Pasteur with no sound conception of the cause of disease or food spoilage. Before Pasteur, we did not know the cause of spoilage, and such methods of prevention as had been slowly developed were based more on superstition than on fact.

It is significant to note that for the first time there was an application of the scientific method to the solution of the problem of disease and food spoilage. If we were to establish any particular date at which the modern concept of applied scientific research had its beginning, I believe the work of Pasteur on the cause of food spoilage and the transmission of disease

would offer the most authentic illustration. It was the work of this man which laid the foundation of our present standards of sanitation.

The spoilage of foods is more directly related to bacterial contamination with subsequent incubation than any other factor, but for the modern food processor and distributor there are three other types of spoilage of such importance that they must be safeguarded to provide a commercially satisfactory product. These are, first, chemical changes brought about by enzymes; second, chemical changes brought about by oxidation, and third, physical changes, such as desiccation which impair texture and palatability.

Slow Starvation Facing World

The world faces again the prospect of slow starvation for many of its people. In fact, there are areas which have never developed the principles of production and preservation to the point that the people could be free from the worry of inadequate food supply. It is another illustration of the degree to which material developments are impeded by lack of social progress. The system of free enterprise and the rational adjustment of populations are among the many social factors of importance in this problem.

We have heard much in recent years about feeding the world and the responsibility of the United States to supply that food. Several years ago, when we were using the slogan that—"Food will win the war and write the peace," I had occasion to make some calculations based on the U. S. Department of Agriculture estimates of food and feed supplies. These calculations showed a comparison of the requirements and the supply of each of the more important nutrients in this country, and the possible excess available for feeding the world. When approached from this angle it was perfectly evident that we did not have the food to supply even a small percentage of Europe, let alone the starving millions in China and India. When simplified to the lowest possible degree and considered on the basis of caloric requirements alone, the situation was equally impossible.

I do not belittle the impulse of every American to alleviate human suffering brought on by starvation of our fellow men in other countries. I do not believe, however, that strictly humanitarian considerations can draw a distinction between starving Europeans and starving Asiatics.

World Food Supply Problem

The futility of solving the world food supply problem with our own excess must now be perfectly clear to everyone who has even raised the question in his mind. The only

answer to the question of world food supply must be the development of agricultural resources, and an adjustment of population in each country. This involves social problems that are at this date more complex than the technical problems. So long as the principal limitation of population growth is in the supply of food available in certain parts of the world, there is no chance that one country can make up a world food deficit.

These calculations of our food supply were summarized in 1943, and I made the prediction that we would fail in the promise implied in our slogan that—"Food will win the war and write the peace." Whether the slogan were interpreted as a threat or a promise it was equally impossible to attain. Food played a significant part in winning the war but has failed miserably in writing the peace. Even with the bountiful crops from unusually good seasons and the spectacular accomplishment of an overworked farm population, we have seen the insignificant effect of our food in preventing starvation in just a few countries and the profound effect on our own economic system when we attempted to carry out such a program.

Prehistoric Man

We have called your attention to the contribution of prehistoric man to our food problem when he domesticated certain animals and learned to cultivate cereals and fruit. The effect of domesticated animals on the supply of food is often missed or misinterpreted. There are two points that need to be reconsidered from time to time if we are to keep in mind a clear picture of the effect of animal production on food supply. The first point relates to the need for reserves of food for times of famine or scarcity. It is a fact that the livestock population of this country constitutes one of our greatest food reserves. It amounts to more than the annual carry-over of all storage of cereals and grains combined. Furthermore, the amount of livestock can fluctuate with the supply of other foods to assist in balancing the over-all food supply and thus stabilize our entire economy.

The second point to remember in considering the importance of animal products is that a very large portion of the human food made possible by animal production utilizes land and vegetation which is not suitable for the production of human food by any other means. I refer to the grazing land which exists in large areas in some parts of the country, but which also exists in small areas on most of the farms all across the country.

The crying need for an improved world food supply is the adoption by other countries of some of the important developments of applied sci-

tific research. Suppose we enumerate a few of these:

1. The use of better seed stock for cereal grains.

Under this heading we should list:

(a) Disease resistance, (b) drought resistance, (c) higher yielding varieties, and (d) varieties with greater nutrient value, all of which have been bred into our wheat, oats, and other grains by the geneticists working on these problems.

2. The use of soil-conserving and soil-building practices. It has been said that good nutrition begins in the soil. The agronomists have made important contributions to our knowledge of soil practice through their researches.

3. The science of animal nutrition has shown us how to feed our animals and poultry to effect more efficient production. This has been a long and arduous process in the development of information on the nutrient requirements of the various species of animals, followed by the accumulation of information on the nutrient content of various feedstuffs and the determination of the digestibility and utilization of these feedstuffs.

4. Again the geneticist and animal husbandman have developed by scientific breeding methods certain strains of animals having greater efficiency of production. For example, the dairy cow of today can turn farm roughages into milk with much greater efficiency than the parent stock of the last century. The laying hen has upped her production from an average of 87 eggs to about 144 eggs per year since 1920, all due to better breeding and better feeding. Furthermore, the size of the egg has increased from 22 oz. to 26 oz. per dozen. Also, the quality of the egg as measured by the thickness of the white and other criteria is much improved.

5. Just one more illustration on this point—that of mechanization of farm operations. There has been such tremendous improvement in this aspect of agricultural production as a result of research by engineers and other scientists that it makes farming today difficult to compare with that of even 25 years ago. When gauged by the archaic methods of some other countries, it provides a complete explanation of our relative bounty and their starvation.

Now, there are many more examples that might be given, and all of these are the direct result of scientific research on the first phase of man's food problem; namely, the production of an adequate supply.

Contribution of Research

I find it difficult to leave the timely subject of food supply and the tremendous contribution which scientific

research has made to the problem wherever there is even a semblance of adequacy. We must, however, get on to the three other great interests of man in food which we enumerated a few minutes ago—palatability, sanitation, and nutritive quality.

Perhaps all of you have noted that when the American people have enough purchasing power there is a demand for higher quality products.

Human Nature Has Not Changed

I don't believe human nature has changed much, so I'll hazard a guess that prehistoric man became finicky about the palatability of his food whenever, for short periods, he was not harassed by the supply problem. Thus, we can date the problem of palatability—meaning odor, appearance, texture and taste—back beyond any written record. One important difference between this prehistoric man and the modern American in this respect was that he couldn't do much about it, while the American of today can do a lot about it. In this age a consumer can refuse to buy your product and pick up a can of your competitors' product if you don't listen—and listen hard—to his demands for quality. The result is that every American food processor has done his best to make continuous improvement in palatability of products which he offers on the commercial market. He has milled his wheat to produce a white flour. He has refined and deodorized his oils to make a bland shortening. He has colored his butter to make it uniform and aged his cheese to produce better flavor.

All of these and countless other innovations have supplied the American market with new and improved food items. For many generations the criterion of progress was conceded to be, first, assurance of supply, and second, palatability. Not until the advent of the scientific method did the importance of sanitation and nutritive quality stand out as further requirements in the food picture.

It was the work of bacteriologists which showed clearly the necessity of better sanitation if we were to prevent spread of disease by the foods that we eat. This presented a new criterion of quality in food which has claimed the attention of processor and scientist alike for the last half century. While great progress has been made under the influence of this measure of quality, there is much yet to be done.

When we consider the question of sanitation, like that of palatability, we must look largely at the methods and processes which are used by man in handling food after he had devised the means of procuring it. The sanitation of foods carries a double connotation. The one is purely aesthetic and comes to us largely from the superstitions of the past. It carries enough background of experience that it can-

not be ignored from a purely scientific viewpoint and certainly cannot be ignored from a commercial viewpoint. The second is based on the scientific knowledge that bacteriologists have given us on the cause of food spoilage and the spread of disease.

While there is much yet to be learned by these scientists, we must acknowledge the contribution they have already made in locating the foci of bacterial contamination, the differentiation of the types of microorganisms—some good and some bad. They have worked out the conditions favorable to growth and multiplication. They have studied the biological characteristics of the heat resistant spore which so complicate the preservation in hermetically sealed containers. They have learned much about toxins and the pathology resulting from the ingestion of certain organisms. They have developed methods of destruction and inhibition of bacteria such as pasteurization and sterilization, and techniques for evaluating the quality of foods microbiologically. These contributions have laid a sound foundation for sanitation in handling foods. It has been the job of the food technologist to apply this information in the design of better plants and equipment and the development of better processes which assure freedom from the harmful effects of contaminated food.

Problem of Sanitation

The problem of sanitation, like palatability and food supply, becomes more complex as the center of population moves farther away in both distance and time from the source of food. Such movement has been accentuated by the industrialization of our economic life. When we consider the immensity of the problem of improving food sanitation at a time when the population itself was rapidly changing, we will recognize from the success attained, the fundamental soundness of the criteria which the bacteriologists have given us. It would seem to be a safe statement that the sudden growth of urban populations necessary for industrialization as we see it in this country could not have been possible without the controls on disease afforded by the better sanitation of food and water together with waste disposal which has come about through the researches of these men in the science of microbiology. That disease and food spoilage have not been the limiting factor on such progress is a credit to scientific research.

Now, there are many problems still unsolved, and many more problems will be presented by a changing civilization which will continue to tax the best scientific brain that can be produced. It is for this reason that our National Cannery Association with its important program of research, together with other similar organizations, find themselves in such a crucial

position to decide the future of man's destiny through the quantity and quality of food that will be available.

But sanitation has its importance not only with respect to the spread of disease. It is likewise a factor in the supply of food because spoiled food is often wasted and waste promotes scarcity. The effect of deterioration on palatability is evident to all processors and draws the line of adequate sanitation even finer after the exclusion of pathogenic organisms has been properly accomplished.

Your Association, through its active participation in research, has contributed much to the welfare of man as well as to the commercial enterprise of its members. We do not have time today to enumerate the many accomplishments of your research program. We must, however, mention a few of the important contributions which the laboratories of the canning industry, including the N.C.A. Laboratory, have made for the benefit of mankind:

1. They have shown a way to eliminate the botulinum hazard. If nothing more had ever been done, this would have justified all the effort of all these men up to this date.

2. They have charted the types of bacteria peculiar to each kind of food and worked out methods of control to prevent the particular troubles which are brought on by each of these organisms.

3. As a by-product of research to improve canned products they have influenced the improvement of many other food items which are not normally canned alone but are sometimes used as ingredients in canned products.

4. They have made many valuable contributions to the nature of the spore with respect to heat resistance. This has contributed to the improvement of other food processes not involved in canning.

Function of Food

Changes in man's interest in food led through the stages of evolution which we know as civilization and brought us to the middle of the 19th Century when the first sound consideration was given to the function of food in the physiological processes of life. For the first time, there was a desire to learn more about the use our bodies make of the food we eat. Again the development of the scientific method provided the means for obtaining these facts. The science of nutrition has itself gone through several important stages as more and more facts were accumulated. The first requirement of food to be recognized was that of supplying energy, and for many years the nutritive quality was gauged by the number of calories which each item of food would supply. The second phase arose from the recognition of the place of protein and the broad classification of foods as carbohydrates, proteins, and fats.

Next came the realization that a few minerals were essential, and this was followed by the discovery of the place of vitamins. With this discovery there was a sudden increase in the effort to learn more about these accessory food factors which were needed in such small quantities and a realization of the importance of many physiological processes which could not take place without these essentials. The result was that the study of nutrition became largely a search for new vitamins and a study of their chemical composition.

Study of Human Nutrition

While great progress resulted from this increased interest, there was relatively speaking a neglect of the other nutrients until recent years. A study of the scientific literature will show that the pendulum is swinging from vitamins to a more thorough resolution of the requirements of protein and minerals. Concurrently with the study of human nutrition, there has been much interest in the nutrient requirements of plants. The adverse effect of deficiencies in boron, manganese, and copper on the growth of plants is no less striking than the deficiencies of vitamins, amino acids and minerals in animals. The work of the agronomist in establishing the nutrient requirements of plants and the effect of the application of this knowledge on the supply of food has already been mentioned, but the effect of this work on a better understanding of animal and human nutrition must not be underestimated.

New tools and new techniques are constantly coming forth through the creative work of scientists. These make possible more precise studies and speed up the advance in our knowledge of the requirements of all living things and the particular function that each nutrient plays in the various life processes. More exact information is reported every day on the source of these nutrients, thus giving us a new criterion of food quality. As we develop more exact and more rapid methods of assaying our food supplies for the required nutrients, we proceed with the development of improved processes which will conserve these nutrients. It is important to note that applied research must wait in most cases for the development of more fundamental information.

Now, let us look at the broad picture of food research in this country. Where is it being carried on and what is the objective?

The incentive to satisfy the wishes of the consumer will still guide researches to study factors affecting palatability; also, studies to further improve sanitation—but each change must now be measured by the yardstick of nutrition.

The research of tomorrow in the food industry, as in all other industries, will primarily concern itself with

practical problems, and it will require the use of the knowledge of the laws of nature to accomplish practical results. The discovery and enunciation of these laws of nature belong primarily in the hands of institutions where research is endowed and supported for that purpose. It cannot be too strongly emphasized that applied research has for its foundation the basic research which thrives best in the university.

There are several great agencies of research, each having a very proper place. According to my classification these are:

1. Privately-endowed institutions and universities.
2. State universities and experimental stations; Federal Government research laboratories and experimental stations.
3. Commercial laboratories.
4. Industrial research laboratories.

It seems to me they line up in this order because of the type of research for which they must, in each case, accept responsibility.

The privately-endowed institution usually has more freedom and, therefore, may apply its talent and facilities to more fundamental problems without regard to application of results.

The industrial laboratories, on the other end of this list, are usually an integral part of an organization set up to make a profit for its shareholders by performing a public good. These laboratories must, therefore, apply themselves to the solution of practical problems. This does not mean that the institutional research programs are never capable of solving a practical problem—they do bring forth practical solutions in many instances. It does not mean that the industrial laboratories undertake no fundamental investigation, for we can think of many fundamental contributions from the scientists in industry. The difference lies in the field for which each organization must feel a particular responsibility.

The State university and the Federal Government research laboratories are, it seems to me, midway between these two extremes in freedom of action and responsibility for practical results.

To Build a Better Life

The objective of all this research is to build for man on this earth a better life.

The incentive in our free system is the right of ownership in that which is created. This holds true for the researchers in academic institutions as well as in industry, although in basic research there may be no immediate practical use for the greatest discoveries and thus no compensation to the discoverer except the recognition by contemporary scientists.

The question is often asked—where can money be placed to obtain the greatest results in scientific research? There is no simple answer to this question because it depends on the particular objective. In my opinion, it is the responsibility of an industrial manufacturing company to conduct its business on a successful and profitable basis. The company owes this to the shareholders who have their savings invested for obvious reasons and to the public because a successful business is an asset to the community while a losing business is often a liability. The first place to spend research money, then, is on the problems which will benefit most the profit-making operations of the company. This may be either the immediate problems facing the company or the long-term problems which will affect the competitive position of the company in future years. There are always such problems in which the company has selfish interests apart from any other industry or any other company within the same industry. I use the expression "selfish interests" advisedly because it is these interests which continually drive an industrial organization to perfect its products and the efficiency of its operations. It is these interests which force a progressive company to greater and greater public service.

Should Cooperate on Research

When the research program in any company is adequate to care for the strictly competitive problems, it is then time for the company to undertake cooperative work with other companies within the industry on problems in which there is a common interest. There are many of these problems and fortunately such co-operative action has a long tradition in your Association. Attention should be called, however, to the ever-widening use of science in industry. The discoveries of science this year make possible even greater use of science next year in an accelerating pace of progress. Any company which does not expand its program of research is almost sure to lose ground competitively, and any association which does not expand activities in cooperative research will not make the greatest use of its opportunities.

Now, my time has expired and I have not made any Utopian promises. Some of you may have expected me to make some predictions about the future of science in the food industry. My predictions are these—we shall continue to be harassed by insects, bacteria, enzymes, oxidation, desiccation, and other kinds of food deteriorations. I believe science will find new methods for partial control of these troubles. We have seen increased interests in the use of anti-oxidants to inhibit oxidation. There is room for great progress along this line and

since the substances are chemicals, their use constitutes a change of philosophy in food preservation.

Use of Antibiotics

When the public realizes that all matter, including their own bodies, is chemical in nature, they will no longer fear the word "chemical," and a new era of food preservation will be ushered in. I predict great discoveries in the use of antibiotics to delay certain types of food spoilage. The active ingredients in these antibiotics may then be isolated and synthesized. So long as the antibiotics are used, it will be "natural" preservation of food, but when the active principle is synthesized, it will be "chemical" preservation. Science has provided the means of determining whether a substance may have deleterious effect when incorporated in a food. Food processors must use science to answer this question on any contemplated change which threatens the wholesomeness of their products. In fact, they must be required to use science for this purpose—then, if we are to have progress,

the public must be taught to have confidence in these results and not be swayed by some prescientific superstition.

I anticipate great progress in the packaging of food for greater protection and greater convenience. Whether any new plastic materials will be available for wide use in the canning industry, I cannot say.

Bacterial Death Ray

There has been much excitement for several years regarding the possible use of some bacterial death ray. Laboratory use has been made of X-ray, ultra-violet rays, radio frequency heating, supersonic vibration, and electronic bombardment for the destruction of bacteria. There is yet a long way to the practical application of any of these as a replacement for conventional heat and temperature control in food processing.

In closing let me say as a final prediction, that science will continue to exert a profound influence on the progress of food technology.

THE IMPACT OF EUROPEAN RECOVERY ON AMERICAN FOOD PRODUCTION

By W. I. Myers, Dean, College of Agriculture at Cornell University

Two and a half years after VE Day, the world food scarcity is more acute than at any time in recent history. Remembering the rapid recovery after World War I, everyone was too optimistic regarding the restoration of food production in Europe after World War II. Even with favorable weather and the pressure of hunger, 1946 food production in Western Europe was only about 80 percent of prewar because of shortages of fertilizer, feed, machinery, work animals, and labor. Nineteen hundred and forty-seven crops were further reduced by extremely unfavorable weather. Compared with this, U. S. food production is about 130 percent of the prewar average.

Improvement in Living Conditions

The first and most important step in strengthening the democratic governments of Western Europe is an improvement in living conditions. Democracy with individual freedom can provide a better life if it has a chance, but it must have a chance. The people in free, war-torn countries

are hungry, cold, tired, and discouraged and this misery breeds desperation that might well result in revolution, and communist dictatorship. Russia and its satellites are fighting a "cold war" to create chaos and continue misery. There can be no logical stopping place for world revolution short of world domination. The Soviet Government dominates the Balkans and is exerting steady pressure on Western Europe—a political vacuum with no central government in Germany and weak governments in France and Italy.

Germany, Hub of Western Europe

Germany, the hub of the wheel of Western Europe, is a penal colony of 70 million people run by four armies. Its rehabilitation is essential to European recovery and the welfare of neighboring countries as well as to U. S. taxpayers. The Americans and the British will have to do the best they can within their combined zones, with the hope that the French will join in with the zone they occupy. There is little chance of getting co-operation from Russia which is exerting every effort to make the recovery plan fail.

Whether Western Europe remains free or becomes communistic will be

decided within the next year or two. Instead of a piecemeal approach, it is high time for a comprehensive program to help democratic countries help themselves to again become self-supporting. The President's Committee on Foreign Aid has made recommendations on a European Recovery Program to meet needs that could be met safely and wisely within this country's productive capacity. The President's proposals are now before Congress, and it is important on the grounds of intelligent self interest, as well as humanity, that a constructive program be devised and adopted.

Here are seven important considerations of a European Recovery Program:

1. Loans from the International Bank where there is a basis for sound credit. This money would be for productive machinery that will repay investment.
2. Loans from the U. S. probably through the Export-Import Bank for raw materials to be fabricated—cotton, steel and such.
3. Grants primarily from the U. S. for food, fertilizer, coal.
4. Administration on a sound business basis.
5. Require maximum efforts for self-help, including the stabilization of currencies.
6. Encourage private financing by their own citizens and U. S. corporations.

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7. Four-year program with declining assistance year by year.

If a European Recovery Program is adopted and recovery is attained, a decline in U. S. food exports can be expected in time, but it will be less abrupt than in 1920-21. Even with favorable weather, several years of good crops will be required to restore world food reserves to safe levels. Agriculture is in a relatively strong position in the world economy with an eight percent increase in the world population and food demand. There are meager possibilities of a quick increase in world food production, except with sugar and vegetable oils.

European recovery will have little short-run direct effect on the food processing industry, but it will have an important indirect effect. Contract prices of canning crops will have to compete for farmers' land and labor with staple crops such as grains which are high priced due to a world shortage. Although grain prices will decline from present levels if crops are favorable, they are likely to continue firm for several years.

Danger of Feeding Wheat

With full employment at high wages in this country, there is danger of feeding too much wheat to livestock because of the demand for meat and the shortage of feed grains, especially corn. Here at home eight percent more people are consuming 20 percent more meat per person and 16 percent more of all foods than before the war. The appeal will be continued to minimize wheat feeding of livestock and to voluntarily economize on meat consumption to save lives abroad and to soften the impact of a reduced supply of meat on prices and wages in this country.

When the readjustment in prices occurs, it probably will be the most violent for grains, meat and other products that are highest in price. The law providing price supports at 90 percent of parity expires this year on December 31, but price supports may be extended beyond this date at present or lower levels.

Outlook for Over-All Economy

The outlook for the over-all U. S. economy in the next few years seems to indicate that although prices and business activity may reach still higher levels during 1948, a readjustment to lower levels is probable within the next year or two. The severity of this recession will depend in part

on export demands and the recovery of foreign countries, but it is not likely to be a long depression.

Farm Prices May Not Decline

Prices of farm products may not decline this year, but present high levels are not likely to continue indefinitely. Farmers will have lower net incomes this year than in 1947 because farm costs will be higher in relation to prices received. The entire food industry, especially producers and processors, faces a difficult period. High costs have increased markedly the break-even point in volume for both groups, and costs, both in production and processing, are likely to lag and remain high when prices decline. Cautious, conservative operation is the soundest policy for the entire food production industry—farmers, processors, and distributors.

When a decline in the prices of processed food occurs, the proportion of the consumer price that is required to pay for processing and distributing costs will increase. Both consumers and producers will be critical of this situation. In the past it has resulted in resentment and friction, and sometimes in investigations, all of which have hurt the industry. Each group has its problems and the easiest thing to do is to blame its troubles on others. It is difficult to divide a deficit and keep everybody happy.

Steps to Minimize Difficulties

These five constructive steps are suggested to minimize these difficulties:

1. Strive to keep production of processed foods in adjustment with probable demand.

This is easier to say than do but the industry is in a better position than last year, because it now has 1947 consumption figures as a guide. Some reduction is likely from the abnormally high wartime proportion of fruits and vegetables processed, but the long time upward trend is expected to continue. With continued high levels of consumer incomes in prospect, the demand for processed foods should continue strong in 1948, but inventories should be kept at as low levels as possible consistent with the scale of operations. More adequate and more accurate statistical information on pack, movement and carryover of processed foods is essential in this readjustment period. Producers and processors should cooperate in getting government agencies to do this job which is essential for intelligent planning.

2. Make prompt reduction in prices of processed foods when prices to farmers are reduced so as to coordinate production and consumption.

In periods of falling prices, farmers frequently receive a price which should clear the market but fails to do so because of the lag in wholesale and retail prices.

3. Strive for greater efficiency in production, processing and distribution.

Methods, equipment and facilities of some operators are outmoded. With a price-cost squeeze in prospect, greater efficiency will be forced by competition of more efficient firms.

4. Increase emphasis on production of high quality processed foods.

During the war anything could be sold and was. In 1946-47 the situation changed and the "cats and dogs" became a merchandising problem. Prices had to be reduced to move lower quality products, but they hurt the consumption of all processed foods. Quality production costs more but it will be worth more. Premiums for quality are increasing and they will justify the efforts of processors and producers. In many cases, the prices paid to farmers by processors do not reflect adequately the differences in the costs of handling or in the yield of processed foods associated with size and quality of the raw products. Don't only preach quality but pay farmers for it so as to make quality products profitable to farmers as well as to processors. More vigorous research programs are needed to improve the nutritive quality as well as the taste and appearance of processed foods.

5. Carry on a vigorous educational program to give producers and consumers the facts concerning food processing and distribution.

Effective Teamwork

Information and understanding are essential to the effective teamwork of producers and processors in their joint job of food production. This is especially important during the readjustment period to explain why price reductions are necessary and the benefits of sharing problems. The Land Grant Colleges and Extension Services will be glad to assist in this effort.

Producers, processors and distributors are basically cooperative rather than competitive, realizing that no one group can prosper for long unless the others also are prospering. Let's continue to improve the understanding and cooperation between all factors in this great industry.

HOW WELL ARE WE MINDING OUR OWN BUSINESS?

By Arthur H. Motley, President,
Parade Publication, Inc.

As far as America was concerned, 1946 was far from a good year. Any man or woman in the United States who doesn't know that as a whole we presented a very sorry spectacle to the world, has just been closing his eyes to what has been going on. It is no secret to any thinking person in Washington or anywhere else that part of our present difficulty stems from the fact that the United States of America threw away her leadership. Had we been able to maintain the unity, the cooperation, the effectiveness we had during the war, Russia would not have dared to stay out of the recent economic conference which took place in Paris. She and others dare only because they are not certain that this thing we pride ourselves on—American democracy—has the guts or the drive or the power to continue to avoid serious economic dislocation and perhaps disaster which would open the door to some strange and odd ideas.

Nineteen forty-seven has not been much better and the reason, again, in my opinion, is that too many people in this country are not doing what they did during the war—minding their own business—and minding it so well that the job in their laps—their particular responsibility—is being handled with the same high degree of efficiency and effectiveness that was paramount in our war effort.

What do I mean by that? Just this: It seems strange to me that the political leadership of this country, if it were at all mindful of its responsibilities and if it were tending to its own business, would take time out to lead with its chin (and get it out a mile) by endorsing a Newburyport Plan (calling for retailers to institute a flat 10 percent cut) that even the stupidest businessman knew was a phony from the start and would fall flat on its face.

Nonetheless, it had endorsement from the highest places, a fact which did not prevent this particular plan from collapsing almost immediately. The Newburyport Plan was merely one of the many economic phonies that have been pushed at the American public by politicians who neither by experience nor training are qualified to operate successfully in the business area but who, unfortunately, keep on trying.

Customary Whipping Boy

Looking for the customary whipping boy (the politician's face-saving device) ill-advised political leaders now blame the increasing prices of food on grain speculators in the "futures" market. This was too much, even for the Democratic press of the country. They were quick to point out

that the price of grain was higher in both Canada and the Argentine where no "futures" markets exist.

If the administration were minding its own business, and admittedly a part of its business is our present price difficulties, it would make an honest attempt to do something about price inflation in the Government's own area, using tools which are properly the tools of government in a free economic system.

Obviously, the money inflation which our system has had to take on in the financing of a total war has had a very direct bearing on price inflation. But if inflation is the thing we are worrying about, the politician, if he were



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minding his own business, should be deeply, seriously, and actively concerned in at least a modest monetary deflation, withdrawing from our currency system some of the billions of dollars we have pumped into it since 1939.

Reduction in Government Expense

If the Government were really minding its own business, and minding it well, it would have long since effected major reductions in government expenses. There is no question in the mind of any politician, regardless of label, that the expenses of government could be reduced materially and without any real loss to the public in government services.

Regardless of where one stands on tax reduction, for or against, a real program of government economy, with the savings applied to the reduction of

the public debt, would be a more satisfactory answer to the advocates of tax reduction than the present callous indifference to the whole problem.

The same thing goes for labor. In recent years, it seems to me that labor has concerned itself more and more with almost everything in the world except the one basic, important function of labor, which is to produce more.

I have read assiduously much that has been written into the latest labor contracts. An awful lot gets in there—almost everything except planned parenthood—and I am sure that will be included next year. It is difficult to find a single word about increasing production which, to my way of thinking, is properly the primary function of labor.

Labor is properly concerned about high prices. It is a concern to everyone in America, but like the politician, it seems to me that labor is trying to find a whipping boy to blame for the increased cost of living in this country. Like the politician, labor refuses to admit that any part of its actions may have contributed to our present cost spiral.

Instead, we see labor attempting to prove that the retailer is profiteering; that the wholesaler is gouging. Here and there about the country, unions are setting up retail stores operated by labor either on a volunteer basis or on a paid basis, in an attempt to show that the merchants don't know their own business—that high prices are due solely to poor merchandising.

Labor leaders, like the politicians, know this is nothing more than an attempt to drag a red herring across the road to conceal the fact that labor's productivity per man hour has not increased as it could and should. This lack of an increase in productivity is one important contributing factor in our spiral of higher prices and it goes without saying that increased productivity would help materially in reducing prices.

Feather bedding, jurisdictional strikes, unexpandable craft unions, political committees on everything from freedom for Palestine to the Unity of the Nile Valley might very properly come after labor has performed its primary function well; namely, the function of production. Until that function has been efficiently and completely discharged, it seems to me there should be no master-minding elsewhere.

Concern of Businessmen

The same criticism applies to business. In my book, the concern of businessmen is management. Everyone is aware of the increasing amount of time that businessmen have been spending in the political arena since the advent of the New Deal—in Washington hearings, in lobbying for certain legislation to take care of their own business or their own industry.

All too frequently this legislation has turned out to be a strait jacket, and business appears unmindful of what invariably happens and what has happened in England when the component parts of an industrial civilization turn to the law makers for too much help.

I am not referring now to such legislation as the Taft-Hartley Law which as far as I can see is an honest attempt to correct, in as fair a manner as possible, the inequities of previous legislation. More particularly, I am referring to the attempts of business to promote permissive monopolies and further cartelization of industries which tend to eliminate competition to protect profits and which inevitably result in the maintenance of the status quo.

Progress on Competitive Basis

Management, like labor, is only functioning well when it concerns itself with progress on a competitive basis; not when it concerns itself with the protection of what it foolishly believes to be its "rights."

We hear much about the difficulties of management to maintain a low "break even" point. This is a sound concern and with the mounting costs of labor and raw materials, a low "break even" point is admittedly difficult to maintain. However, a fight to maintain a decent "break even" point is very definitely the obligation of management. It is a responsibility which management cannot continue to shirk by passing along, in the form of higher prices to consumers, its failure to avail itself of the part that new technologies might play in holding the price line. And management has all too frequently failed to test new methods of human and public relations which could possibly guarantee uninterrupted production, with a consequent lowering of prices.

When a printer insists on increased prices and has not as yet installed automatic reels, flying pasters, electric eyes for the control of register, and other proven methods of speeding up press production in his plant, I say he is not minding his own business well and is therefore undeserving of those increases.

There are certain industries that are producing better products today. In at least one instance I know of an industry that is selling an improved product to the public at less than pre-war prices. In every case that industry is paying more for labor and raw materials. Yet in every case the management of that industry has figured out a way to produce more with fewer man hours. In some instances, equally good but cheaper raw materials were utilized. They have not completely succeeded in creating an atmosphere which has permitted uninterrupted production but this industry has definitely made progress in the right direction. Lucky? Perhaps, but

they are also tending to business—their business—good management.

The fundamental policy of production was followed by canned food producers. That is the perfect answer to those who want government controls and regimentation. Canners continued to produce at increasing volume in anticipation of what proved to be a sustained market—a market bigger than before the war. Prices leveled off and actually declined instead of continuing to rise.

Canners maintained not only the status quo, but through competition—freedom of choice—they have been able to supply the consumer with a wide range of canned foods. Canned food producers are the one industry with the possible exception of the drug people, where prices have declined—principally because of maintaining competition.

The average housewife doesn't understand, specifically when shopping, that prices have declined on canned foods. She walks in the grocery store—looks at the price of meat, and some of the other high cost items—and turns to her neighbor and says, "Hmph! All food is high!" She says all food prices have increased, but she never takes time to think that a can of corn or a can of peas—or maybe several dozen other canned food items—are not any higher in cost today than they were a year ago—in fact, in most cases they are selling for less money.

Essence of American Enterprise

The job canners have done is the very essence of the American free enterprise system—proof that if we produce enough we will develop competition. This job done by canners is important enough to be on the front page of every newspaper in the country and on every radio network. The principle behind this job should be announced to the world—a lot of people packed a lot of peas, and as a result of this production, prices leveled off, the consumer got the food, the farmer got his profit, and the canner made a little money for himself.

Distributors, wholesalers, and retail grocery stores should emphasize the fact that food items such as canned foods have declined in price. They will be doing this as a favor to themselves as well as to canners.

I think you canners should be praised for for the fine job you have done on educating the public on the advantages of using canned foods. I want to pay especial tribute to the educational program of N.C.A. This program should be intensified. It is important because it is intelligent selfishness.

In conclusion: "What about trouble ahead—surpluses, depression, high-priced inventories?" I do not believe

wholesalers will be stuck with inventories due to cautious buying. No industry is going to be stuck with high-priced inventories again. Business today is making money out of sales. And certainly this is true of the canning industry. You have expanded the market and have persuaded people to trade money for time and convenience. That is salesmanship!

The citrus people, for example, have forgotten that a lot of people were planting oranges years ago for eating, not drinking, but someone decided that citrus fruits could be squeezed and the juice utilized for drinking—and what was the result—the citrus canner came into being and you got an expanded market for citrus fruits. Selling is the answer to expanding the market!

How about our own area—sales? How good a job have we done? I don't think we've done any better job than the politicians or the labor leaders or the businessmen. I want to tell you why I think so, and what I believe you and I ought to begin to do about it.

We've been in a seller's market where anything went. Some of us are out of that now; others in the hard goods lines are still in it but know they will be out of it before too long. We've been filling needs. That's a lot different from creating wants. In some industries they're still standing in line, hat in hand, waiting to get a priority or an allocation. That isn't going to last forever. We're back now at the beginning of want creating, which is different from need filling, because the latter is not selling.

Let's take a look at those four criteria that you and I talked about all during the war. Every postwar planner's speech on sales management or selling included these four things: Let's see how well we have fulfilled them.

Adequate Sales Force

Coming out of the war, the first thing I remember we said was that after we got into the buyer's market we would have an adequate sales force to sell and service the product satisfactorily. Remember that one? That's what we were going to do, but have we done it? We have not! At the present time we are trying to properly sell and service a larger volume of business than we did before the war with approximately 500,000 less sales and service personnel. Laugh that off!

The automobile dealers of America are squawking because the manufacturers did not make 8,000,000 automobiles last year. They could have neither sold nor properly serviced 6,000,000 automobiles even if the automobile industry had been fortunate enough to manufacture them. They didn't even do a good job of selling and servicing the 2,700,000 cars that were built in 1946.

If you don't believe that, ask almost anybody who bought an automobile from almost any dealer in America. Ask him about the kind of selling, the kind of service, the kind of treatment he got.

It seems to me that it is high time for those of us charged with the responsibility of properly selling and servicing products, whether they are still in short supply or full supply, to give more than lip service to that fundamental thing that we talked about all during the war: An adequate force of sales and service people.

A month ago I went into a big department store in the middle west where I saw some 25 women standing in a line. What were they there for? They were waiting for a chance to exercise the American housewife's God-given privilege of returning something she had bought and which she had decided she did not like. I asked one of the executives of that store how many claim and return windows they had operated before the war. His answer was two. They have one now despite the fact that they are doing a larger volume of business and at a larger profit than before the war.

On that same trip through the middle west, I went into the offices of a utility company and again I saw people standing in a line a half-block long—this time to pay their bills. Again, I asked a company official how many windows they had operating before the war. He told me they had had two. But now the customer has to stand in line to pay his bills. And they wonder where buyer resistance starts. It starts on the seller's side of the counter, not the buyer's side. And it's starting because we—yes, I mean we sales executives—have failed to insist on this first fundamental: An adequate sales force.

What a beautiful situation the automobile manufacturers are in today. For the first time in their history, they're not making all the money—the dealers are rolling in it and they are begging for more merchandise. Here is an opportunity for a manufacturer to say to a dealer, "No more cars until you can prove to us that you are adequately manned and equipped to handle the sales and service of our product."

You and I know quite well that a lot of this nonsense could be stopped immediately because we do not have a manpower shortage of that size.

Selection of Personnel

Remember the second point we talked about? There was to be a better selection of personnel. Remember how we listened to the advocates of aptitude testing who gave us the low-down on the proper way to conduct interviews in order to do a better job of selecting our people? What happened to all that fine talk?

A big food manufacturer told me this story. Late last year, one item in his line came into full supply, so he gave the boys the word. They put on a thumping big advertising, merchandising, and promotion program. But the thing fell flat. The old salesmen did a pretty good job, but the new ones laid an egg as big as the Pentagon. So the manufacturer thought the answer was more training for the new men; but they still laid an egg.

I reminded this man of a conversation we had during the war about selection. He replied that he hadn't selected the old salesmen; that he had never used a selection system in his life. I reminded him of the one thing he had forgotten. The old boys were selected by the survival-of-the-fittest process over a period of years. Only the fittest remained with him so, actually, they were selected. After the war, this manufacturer had taken just any returning G. I. who was willing to go to work for \$50 a week and commissions, put him through a training process, sent him into the field, and then expected him to do a good job.

Training? How Good Is It?

Training? How good is it? Before I went to the west coast on a trip early this summer, I decided for the first time since the war to buy some new clothes. I went to one of the best known stores on Fifth Avenue, where I've had a charge account for years. The clerk who waited on me didn't know from nothing. How he got to be a clothing salesman I'll never know. He didn't know or care whether the suits were made of wool, rayon, cotton or what-have-you, or who made them or why. There they were on the racks. Take 'em or leave 'em.

I bought a couple of suits because I had to have them, but when I got home I thought to myself, "Never again. I'm through with that place." In all the years that I have traded there, I'd never had an untrained sales person take care of me. But now I got not only an untrained person but a stupid one as well.

On thinking about this experience, I found I was not upset because prices were higher than they used to be. But I was definitely upset and bought less than I really needed because the person who waited on me was not trained in even the first principle of salesmanship, a knowledge of his products.

While I was in Los Angeles at a recent convention, we frequently drove down Wilshire Boulevard in the morning to find a place for breakfast. At the drive-in we selected, it was a major operation to get the attention of the waitress. The second morning we went there, I had to ask for my coffee five times before I finally got it. The owner of that place probably worries about buyer resistance, but he

has never troubled to spend a dime on any kind of training of the girl who waited on me.

I stayed at one of the leading hotels while I was in Los Angeles. The first morning I was there I stopped in the lobby to buy some cigars. I stood at the cigar counter for 5 minutes while the girl behind the counter talked to some female relative on the telephone. I finally bought some cigars and because they were a brand I did not recognize, I asked her whether they were clear Havana, shade grown, or Sumatra wrapped, etc. She did not know. Furthermore, she did not care. She simply knew she sold a lot of them, so they must be good. On top of that, the bill was \$1.18, plus three cents sales tax. Not wanting pennies, I gave her \$2.00 and a penny and explained that since my bill was \$1.21, she could give me 80 cents change and I wouldn't have to bother with any pennies.

This simple bit of arithmetic was too much for her. I finally gave up; took the odd penny back and got 79 cents in change which included, of course, four pennies.

The price of cigars has almost doubled but I am not complaining about that. I am making more money, too, and I like cigars. But I never went back to that counter when that particular girl was there. Why should I? Buyer resistance? Who started it? No training!

On our way out to the coast, my wife and I stood for two hours in the aisle to get into the dining car on one railroad. Funny thing, on the way back on another road, we waited well over an hour to get into the diner but we didn't stand in the aisle because the assistant steward came through, inquired if we wanted to eat, and said he would call us when they had a table. We sat in the lounge car in comfort, having a drink while we waited.

Difference to Buyer

What's the difference? The same personnel making the same union wages, but all the difference in the world to the buyer. In the one case there was some training and thought; in the other, none at all.

Within the last 60 days I have been in Chicago three times and each time I've stopped at one of the biggest hotels in that city. Each time I took the trouble to have my office in Chicago go over and register me in because I know what happens to those rooms they are supposed to save for late arrivals. What happened? Every time I got there, they'd never heard of Motley—I wasn't registered in—there was no reservation—and so on, far into the night.

Each time, I had to go to the night manager. One hour later they found my registration—a little slip of paper

stuck away on a spindle. Finally, I was annoyed to the point where I did something I've never done before. I wrote the manager of that hotel; told him what had happened, mentioned that I had been staying there for 25 years, and suggested that perhaps they should train their employees to handle advance registrations.

Do you know the reply I got? He wrote that they were going to discontinue advance registrations because they couldn't figure out how to handle them satisfactorily.

The Price Situation

Training? We haven't even the training to handle the worst problem you and I have—the price situation. With a little training what a difference we could make in the public psychology about prices. What a difference it would make if somebody in the drug business would take the trouble to tell and remind people that most drug prices haven't gone up—that you can still buy 24 aspirins for 25 cents.

I bought a car not so long ago and when it was delivered, there were a few minor but obvious things that needed adjustment. I called them to the attention of the salesman who was making the delivery. I mentioned, casually and pleasantly, that since I was paying several hundred dollars more for this postwar car than I had paid for a similar one prewar, I felt I was entitled to good service.

The response I got from him again demonstrates the lack of training that is current, particularly in the field of price. The salesman's rejoinder was, "I will give you \$500 more right now for this car than you paid for it."

My wife, being a little naive about such matters, asked him if he were really serious, and he explained with great vehemence that the dealer he worked for could sell this particular car for a thousand dollars more than I had paid for it, and that I was lucky to get a car.

Strangely enough, I didn't feel that way about it.

On a recent trip, I casually inquired of the conductor whether the price of the drawing room I had purchased was correct. The price had not been printed on the stub; it had been written in ink. I was immediately given a three minute lecture by this employee. He told me about the terrible things the transportation people were doing to the traveling public in the way of increased rates. It was his considered opinion that if they didn't stop raising the rates, people would stop riding the railroads.

I did not expect this union man to explain that a part of the increase in rates was due to his demands for higher wages; but it would be reasonable to expect that his employers, faced with this very evident dislike of

higher prices on the part of the public, would have at least trained this man in the proper handling of inquiries such as mine.

This failure to train employees to handle this price problem is evident in all lines, even in the chain stores. Recently, I purchased a couple of angel food cakes. The clerk gave them to me with the comment, "That's a terrible price to have to pay for those cakes . . ." My statement that they were good cakes and that our family liked them was met with the rejoinder that before the war they had cost 29 cents; now they cost 45 cents. "Ain't it a crime!" she said.

You say nothing can be done about these matters. It is being done! It is being done by men who are giving more than lip service to the fundamentals of selection and the training of adequate numbers. I can cite the case of a wholesale drug house with headquarters in New York, N. Y., that took the trouble, three years ago, not to talk about it but to do something about it. They hired an expert who ran tests in one of their branches. He found, for instance, that they could take untrained girls who handled 65 percent of this company's business over the phones and train them to do a better job, meanwhile eliminating those who couldn't take the training. Today, that company has better public relations and more sales than it formerly had. Sure, those girls are getting more pay than they were getting before, but they're well worth it.

Training—it can be done.

I recently made a business trip to Wichita, Kansas. My stay there at the Allis Hotel was a pleasure! It was so unusual that I commented on it to a newspaper publisher with whom I lunched the next day. He told me that the wonderful service at the Allis was due to the efforts of a new manager who believed that you could train and indoctrinate your personnel, even though those people didn't particularly want to be busboys, bellhops, or chambermaids. Every single phase of the service at that hotel was a pleasant contrast to the customary lack of good service in hotels elsewhere.

Well-Trained Personnel

It can be done. But it won't be done unless top sales management does something about it. It won't happen in the automobile business until the automobile sales managers begin to tell dealers that they are either going to treat their customers right, with adequate, well-selected, well-trained personnel, or they will find someone who will. It is the same thing in your department stores, chain stores, or any other line.

It can be done, whether you have a union or not. I've had some dealings with unions myself. It is work, and

not always easy but you can still do it if you are willing to do more than talk about it.

Adequate numbers, well-selected, well-trained, indoctrinated. Why haven't we done it? When we said that by 1945 we could employ 60 million people, I don't think we really believed that. We weren't willing to let go. Businessmen ought to stop reading those prophets of doom who publish dope sheets every Monday morning. So far, they have been wrong about almost every single solitary step of the postwar era. Most likely they will be wrong about the immediate and long-range future because the economic realities are these: 60,000,000 people are gainfully employed in this country at the highest wages in history and at a real income greater than it was in 1939. Those are the economic realities. You and I, sales executives, worry about buyer resistance, much of which is generated on our side of the counter.

Because those 60,000,000 customers are gainfully employed at a real income greater than it was in 1939, they still need and can be persuaded to want the things that you and I have to sell. That is our job.

Regimented Economy Can't Compete

May I conclude by quoting a statement made by Sumner H. Slichter, Lamont University Professor at Harvard University: "Our economy has the tremendous advantage of possessing three and a half million business enterprises outside of agriculture and about six million business enterprises in agriculture. This means that the American economy has nearly ten million places where innovations may be authorized. Have you ever thought of that? Ten million places where experiments may be tried; where no further authority is needed to authorize an experiment. Our economy operates under about ten million separate private business budgets. No regimented economy can hope to compete in dynamic drive with an economy which possesses nearly ten million independent centers of initiative. I don't see that the British or the Russians have a chance."

I don't think they have a chance either provided we Americans—politician, labor leader, businessman, sales executive—mind our own business. Let's mind it so well that there will be no question that we are performing the primary function of our particular part of industry. Let's not fritter away our productive unity by charges and counter-charges. Let's not blame the other fellow when we, ourselves, are also at fault. Let's mind our own business as well as we know how. Then and only then will we regain and keep world leadership in the U. S. A., a leadership that appears to be sorely needed for these troubled times.

BUILDING STRENGTH*(Continued from page 29)*

form and the Convention heard his remarks of acceptance of his new office.

The Closing General Session was held in Room 21 of Convention Hall Wednesday morning, and at this session Chairman Henry P. Cannon II, of the Resolutions Committee, read the 1948 resolutions which were voted on and passed (*See page 66*); and the officers were installed.

President Cumming then announced the personnel of the 1948 Finance Committee (*See page 77*), and the Convention voted acceptance of the appointments. He then recognized Henry P. Taylor, who made a presentation to Past-President Rutz of a watch on behalf of the Association, with fitting words of appreciation of Mr. Rutz' outstanding service and performance of the president's office.

Special Convention Conferences

Three canning problems conferences were held on Tuesday afternoon, Wednesday morning and Wednesday afternoon in Room 20 of Convention Hall.

Technical problems ranging from government standards for canned foods, canning plant sanitation, nutrition values of canned food, and other important subjects were discussed at the Tuesday Conference, presided over by E. J. Draper, Treesweet Products Company.

The first discussion on the program was presented by Joseph Callaway, Jr., of the U. S. Food and Drug Administration, Washington, D. C. Mr. Callaway outlined some of the problems connected with the formulation of canned food standards. He urged cooperation between the canning industry and the Government in adopting standards for canned foods that would assure the greatest benefit to the consumer and at the same time be practical from the canners' viewpoint.

Following Mr. Callaway on the program were Ralph E. Sanborn, California Packing Corp., and H. K. Wilder, N.C.A. Western Branch Laboratory, both of San Francisco, Calif., who discussed some of the problems concerning canning plant sanitation and the progress made in their solution. Both Mr. Sanborn and Mr. Wilder agreed that canners must continue to observe the highest possible sanitary practices in the processing and packaging of canned foods. Both speakers pointed out the fact that the canning industry had always stood for high standards in plant sanitation.

Dr. E. J. Cameron, Director of the N.C.A. Washington Research Laboratory, reviewed the progress being made in the canned food nutrition research program conducted by the Can Manufacturers Institute and the National Canners Association during the past five years.

Dr. Cameron said that modern canning techniques assured the high vitamin content of canned foods and that the industry is still concentrating on vitamin research. The latest nutritional study, he said, is the work being done on the biological values of proteins with respect to amino acids.

A review of scientific work done in determining the best methods of preserving the flavor of canned orange juice was presented by Dr. L. E. Clifcorn of the Research Department, Continental Can Co., Chicago, Ill. The flavor constituents of orange juice are complex substances, Dr. Clifcorn pointed out, and although great strides have been made in perfecting the canning of this product in past years, there are still things to be learned about the underlying principles, the speaker added.

With K. G. Dykstra, of the Birds Eye-Snyder Division of General Food Corporation presiding as Chairman, the Wednesday morning Conference presented O. G. Braun of the Research Division of the American Can Co., Maywood, Ill., who told how to design and equip a small laboratory for quality control in a canning plant. Company executives, he pointed out, are often at a loss as to how to proceed in setting up this specialized service. He was followed by Dr. Z. I. Kertesz of the New York State Agricultural Experiment Station of Cornell University, who described the action of harmless calcium salts in improving the texture of fruits and vegetables, such as tomatoes and apples. This process is already widely used in the canning of tomatoes, he pointed out.

Canning of food in glass containers has greatly increased, but the exact times and temperatures necessary in this method have not been studied as closely as those for tin containers, said C. T. Townsend of the National Canners Association's San Francisco Laboratory in reporting laboratory studies on this subject. When this research is completed, he said, it will probably be possible to change processes for glass containers in some cases with improvement in the quality of the product.

All cans of food must be filled as full as possible without damage to the

Next Year's Convention

Atlantic City will again house the Annual Convention of the National Canners Association, it was announced by Chairman William Kinnaird of the N.C.A. Convention Committee at the meeting of the Board of Directors on Sunday, January 18. It is tentatively planned to hold the 1949 Convention the third week of January, but the exact opening and closing dates are to be determined later.

contents, it was pointed out by H. A. Benjamin of the Research Division of the American Can Co., Maywood, Ill. How heavy a fill is possible depends on such things as, in the case of whole kernel corn, maturity or the amount of liquid added, he said, and the weight of contents affects in turn the amount of heat required for sterilization.

Final Technical Session

In the first of the Wednesday afternoon group of topics with R. B. Wakefield of Gerber Products Company as chairman, E. J. Cameron and C. W. Bohrer of the National Canners Association's Washington Laboratory outlined factory routines for ensuring successful processing of canned tomato juice. In the rapid growth of this branch of the industry, they said, many variations in factory equipment have come into use, and canners must keep in mind the special requirements for sterilizing this product.

Canners have long known that peas behave like a water softener, according to Dr. L. E. Clifcorn of the Research Department of the Continental Can Co., Chicago, Ill. Where peas are washed, and especially when they are "blanched" (precooked) in preparation for canning, they are liable to remove the hardness from hard water and become hard themselves, he said. One way of preventing this, his studies indicate, is to soften the water with sodium hexametaphosphate, a harmless softening agent, and he described the technique and results of doing this.

When the busiest part of the canning season is over, canners' thoughts often turn to the possibility of adding some new product to their line, said W. E. Graham of the Crown Can Co., Philadelphia, Pa. Mr. Graham listed the hurdles that must be passed in developing and introducing new

(*See Building Strength, page 53*)

1948 Cannery Panel

REVIEW OF THE 1947 CANNERS' OUTLOOK PANEL

By Howard T. Cumming, President,
Curtice Brothers Co.

This type of panel discussion of cannery problems was inaugurated last year in the belief that it would supply some of the answers to the many questions that are on our minds as we come to this Convention. We are at the end of one season and at the beginning of another. We hope to learn something from these discussions and from our conversations with those we meet that will enable us to plan more wisely and operate more effectively as we go through the 1948 season.

Perhaps a brief review of the panel discussions of last year and a briefer reference to the results of the past season will serve two purposes: to introduce to your minds some of those subjects that are most important and to indicate how valuable the judgment of the gentlemen who appear on these panels may be.

Atmosphere of Gloom

Before referring to the discussions of a year ago it is perhaps in order to recall the atmosphere in which the 1947 Convention was held. We had just witnessed a serious decline in the price of canned citrus products. To many there appeared to be a threatening surplus of canned peas. There were those among us, including brokers, distributors and canners, who believed and loudly proclaimed that we were on the verge of a serious decline in the price of canned foods. An economist of some note gained considerable publicity and found many sympathizers when he prophesied a drastic decline in canned food prices in the next 60 days. While there were many who refused to accept that future outlook, they were either in the minority or much less audible. The convention last year was held in an atmosphere of gloom. The pessimists outweighed the optimists.

Perhaps I should remind you that this panel was made up last year of a wholesale grocer, a banker who deals extensively with this industry, a representative of the Department of Agriculture, and two prominent and successful canners.

The subject uppermost in our minds was the then current surplus and its probable disposition ahead of the new pack. That would have an important bearing on the size of the new pack and on prices. The view expressed by both Mr. Krimendahl and Mr. Whit-

marsh—and in almost the same language—was that the 1946 pack would move into consumption ahead of the 1947 pack, and no one on the panel disagreed with them. Some of the reasons advanced for that confidence were the following:

1. There prevailed an enormous disposable income and there seemed to be no good reason to think it would disappear.
2. Full employment seemed to be assured throughout 1947.
3. The population increase of 6 percent and the changing characteristic of that population—from farm to city—suggested a strong and growing demand for processed foods.
4. The average annual consumption of processed and unprocessed food of 1,650 pounds prewar had increased from 10 to 15 percent by 1946 over the prewar rate.
5. There appeared to be greater civilian export possibilities than we had enjoyed for some years.

As we look back to last spring and summer, I think we will agree that the pack of 1946, large as it was, found its way into consumption, and had little effect on the size or the price of the 1947 pack. There may have been a few exceptional items that proved troublesome, but the over-all picture as we approached the 1947 pack was reasonably good.

Situation Precarious

A year ago we were confronted with a possible short supply of tin cans. Some canners had been advised that they would be subject to an allocation. Others were certainly threatened with the same thing. While the situation was somewhat precarious, it is interesting to recall that the banker who appeared here with us made this sage remark: "You may look upon tin plate as a limiting factor, and no doubt there will be a scarcity of tin plate; but the tin plate industry has the faculty of surprising us, of doing the unusual and I confidently expect that this year, barring strikes, the supply of tin plate will be more than adequate for the consumption that is possible."

So far as I know, the efforts of can-



MR. CUMMING

ners in 1947 were not handicapped by the lack of cans.

It was freely predicted a year ago that the cost of canned foods would advance. Even at that time there was assurance that supplies, including cans, would be from 10 to 15 percent higher. There was less certainty about the trend of grower prices for fruits and vegetables. The canners on the panel expressed a "hope" and no more, that these raw materials would be purchased on a somewhat lower level. Mr. Meyer agreed that there was room for adjustment in grower prices, presumably downward.

The lack of confidence on the part of these gentlemen in those predictions proved to be justified. The 1947 *Annual Crop Production Report* published in December indicates that the season's average grower price per ton advanced on some commodities and declined on others, and there was considerable variation in the different canning areas. Peas, beans, and corn advanced, whereas beans and tomatoes declined. I know of no published figure that supplies a per ton cost for all perishable fruits and vegetables that are canned, but if there were one I believe the 1947 figure would be slightly below that of 1946. Nor do I know of any average total cost per dozen figure, but I am certain that an over-all 1947 figure would be higher than the 1946 figure.

Seasonal Business

The seasonal character of this business is partly responsible for the need for ample bank credit. Credit is an important ingredient in the pack of canned fruit and vegetables. Without it the industry would be ruined. With it we may prosper. A year ago our banker friend, Mr. Reed, said: "Certainly there will be ample credit for financing the 1947 pack."

While some segments of the fruit and vegetable industry may have had some difficulties in 1947, I believe the canners generally found that Mr. Reed's prediction was accurate.

As I read over the speeches made on this program last year I detected in all of them a note of caution. While there was no surrendering to those who foresaw depression, there was a recognition of the fact that if we were to have a good year we needed to be conscious of some of the pitfalls that beset this industry. We were reminded of the dangers of over-production, the consequence of which we all know. We were told that consumers were becoming much more selective in their buying and that quality should be our watchword. Holding our costs at an absolute minimum through increased efficiency was driven home to us. Being everlastingly conscious of new and growing competition, such as the frozen food industry, was emphasized. Growing competition between our distributors and among ourselves called for more intensive and better

methods of merchandising. Yes, although there was ground for confidence there was plenty of need for caution.

It is not possible at this time to make a final appraisal of last season, but I cannot refrain from saying that when the history for the year is

written, I believe it will be recorded as a satisfactory year—certainly not equal to some of the war years in volume and profit and, of course, making allowance for exceptions, but a year above the average.

So from here out let's concentrate on 1948.

THE SHIFT FROM SELLER'S TO BUYER'S MARKET

By Henry P. Taylor, President,
Taylor & Caldwell, Inc.

During most of the past seven years the canning industry has not had to worry about selling. People were prosperous, money was plentiful and demand was so much greater than supply that almost anything could be sold. Today, as shown in the charts the Association has supplied, disposable personal income—which means buying power—is higher than it ever has been, and people are spending a larger percentage of it for food than ever before, but the statistical position of some grades of canned peas and the experience of canned citrus both last year and this is a warning that even under prosperous conditions it is possible to lose money in the canning industry.

It might pay us to look at ourselves to see if we are different from other industries and if these differences involve hazards which are peculiar to our industry and against which we should be on guard.

Most other industry operates the year 'round against a backlog of orders. When the orders give out, the industry stops or slows down its operations. Most other industry is able to curtail or stop its operations at any time and to resume or expand them whenever it is expedient to do so.

The seasonal canning industry, however, must produce within brief, rigidly defined periods of weeks a full year's supply of its product. It must operate within that time if it is to operate at all and regardless of whether or not it has orders. Once its commitments for acreage have been made, it cannot curtail or stop its operations except at a price which may well prove ruinous. In general, if it would defer its operation, the postponement must be for 12 months.

Canner Cannot Predict

Most other industry can predict within narrow limits how much of its product it will turn out within a given period. The individual canner cannot predict, except within very wide limits, how much of his product he will process, and while the total output of all packers of a single item will not vary as widely as that of a single packer, it, too, cannot be pre-

dicted except within quite wide limits.

Most other industry can calculate its costs quite closely in advance, but the costs of the seasonal canning industry vary so with the unpredictable weather that they cannot be closely forecast.

Most other industry can be reasonably sure that its product will conform to predetermined specifications, but in the canning industry, under adverse seasonal conditions, even the greatest care will not always insure as high a standard of quality as was planned.

Canner's Product is Vital

Then, too, the product of the canning industry, which is food, is at the same time a vital necessity and something of which you can use only so much. A starving man will pay any price for food, but a man whose stomach is full will not give you two cents for any more until he is hungry again. Small variations between an under- and an oversupply can make an enormous difference in the urgency of the demand for the canner's product. Is there any wonder, then, in so hazardous and uncertain an industry, whose product under varying conditions wakens so wide a range of emotion in the consumer's breast, that the price should also vary widely?

But the canner, rugged individualist that he is, is not satisfied with the hazards that nature has wished on him; he creates others himself. Knowing the uncertainty of his costs, his volume and his market, and that uncertainty should be balanced by reserves, he often gaily starts out on a shoestring. He knows that when the pack is large, sales are slow and prices weak; but he makes no adequate provision to warehouse and finance his own pack, and so does his part to make a weak market weaker. If he happens to have an unusually large pack on a weak market, he will often load up his regular customers at the full list price and later on sell their

competitors at any price they will pay, at least as long as he can get away with it.

But the day is past when we can get away with it. The past history of the canning industry is not such as to inspire the distributor with confidence in times of oversupply. You cannot blame him. You would not pay \$1.50 for an item today which in 30 days might sell for \$1.00. The distributor's margin does not permit him to take chances on a weak market. What does he do? He probes for the bottom of the market and he buys from hand to mouth. As a result, the canner's market is subjected to the most severe pressure and sales are lost because stock is not available in distributor's hands. This is not because the distributor has anything against the canning industry. He is looking for only two things—safety for himself and an advantage over his competitors, if he can get it. The canning industry itself has forced him to this line of action.

Well, what can we do about it? The first thing is to establish a basis for confidence. This means that since we are in a very risky business we will try to reduce the risk and not add to it. It is our failure to do this which has created the lack of confidence. Of course, the industry as a whole can do nothing about this—it must be done by the canners as individuals.

The first thing the individual canner can do is to diversify. Life is even more uncertain than canning, but insurance companies insure it with entire safety by spreading the risk. Two, three or four items are much less likely than one to go sour the same year. Also, if it is necessary to curtail the pack of one item it may be possible to increase another and maintain the same volume. If sales are slow in one item, better sales in another may relieve the necessity for pushing sales on the weaker market and making it worse. It is also generally easier to sell several items than just one.

Canning is Uncertain Business

The second thing is to plan to limit the pack to what the canner can reasonably expect to take care of, to what he can reasonably expect to finance and sell. Since canning is such an uncertain business it sometimes happens that a canner has a very large pack which sells for a very high price and he makes an unholy profit. The thought of this possibility offers a great temptation to gamble on its happening. To do this, however, is to increase instead of decrease the risk in our business, and in the long run it brings disaster. Canning has been passing steadily into larger and stronger hands. One reason for this is that these larger and stronger hands have reduced their risk by doing things I am recommending to



MR. TAYLOR

you. The smaller canners may well profit by their example.

The third thing the canner should do is to plan to take care of his pack. Since he puts up in a few weeks what will be used over a year's time—or longer, he should be prepared to carry it for as long a part of that time as may be necessary. If he turns over to someone else the job of carrying this inventory, he must be prepared to give up the reward in the form of profit which goes with this job. If there is any risk in carrying this inventory, the canner may be sure that whoever takes this risk off his hands will insist on being well paid for doing so. If the canner is to do this job—and he should—he must have warehouse space and financial resources adequate for the pack he may have to take care of. If he is a careful man and has the warehouse, he can get a good deal of the needed financing on the security of his inventory. It is decidedly to the advantage of the canner to do this, because in the long run he will be well paid for doing it.

Refuse to Gamble

Besides being well paid for it, the canner just cannot afford not to have these resources. Not to have them means he may be forced to sell. When canners are forced to sell, the market is weak. Distributors cannot afford to buy on a weak market until it has hit bottom, which may be below—considerably below—the cost of production. The only cure for this condition is prevention, which means careful planning for warehousing and financing and a refusal to gamble on hitting the Jack-pot.

The fourth thing the canner can do is to put up a pack he is proud of and to sell on the basis of quality and not price. If the past few years have proved anything, it is that people will not eat poor quality if they can get and pay for good quality. There is a pressure to buy as well as a pressure to sell, and nothing so builds up this pressure to buy as good quality.

There is just one other thing. If I asked you why you were in business, you would say to make profit. Well, what is profit? Do not think it is something you are entitled to. Or something you can take away from the other fellow. Let's look at it this way. Let's look at the United States. Nowhere in recorded history has a people been so free to reward with its patronage those who served it best, and nowhere in recorded history has a people been so magnificently served, or have those who served it well been so richly rewarded. That is the meaning of profit.

The right to make profit carries the obligation to earn it. Some people look on rights as something that gives

them an advantage, but this is not the case. Rights only give you an opportunity, and that opportunity carries with it an obligation. The right to engage in the canning—or any other—industry carries with it the

obligation not to commit those economic sins which tend to destroy the industry and the service which it renders. To the extent we evade these obligations we court disaster and destruction.

NEW HORIZONS IN FOOD DISTRIBUTION

By William H. Eden, Vice President,
American Stores Company

In 1947 retail food sales reached another all time high; they are conservatively estimated to go well beyond 25 billion dollars. This substantial increase reflects our present national economy of higher levels in employment, incomes, production and prices.

National income for the first eight months of 1947 totaled over 138 billion dollars, compared with 97 billion dollars in the same period in 1946. And, in the last quarter of 1947, personal income, after taxes, was running at the astounding rate of over 179 billion dollars per year. These, and my other important business and financial indexes concur that the present national economic boom will continue for at least the greater part of 1948.

Our population has increased 10 million or 8 percent since 1939, but our economy has grown much faster and our people are not only eating more food, but much better food and buying a larger assortment of food.

Our food production facilities have been very much expanded and improved during the last seven years to provide for the increased demand. It is also true that food distributors' facilities have been improved and expanded in proportion.

Progressive food distributors in all areas of the United States continued to spend many millions of dollars in 1947 building new warehouses and many modern self service markets, as well as enlarging and renovating existing markets, installing new, modern equipment and layouts, and converting service stores to self service.

Distributors' Personnel

Distributors' personnel has also received the attention its importance demands. The higher wage structure, shorter hours, training programs, pension plans, etc., are attracting and holding a much higher I.Q. level of employees, thousands of these men and women with higher educational attainments than formerly.

Many noted economists, research engineers and other experts are also being added to the staff of progressive food distributors. Many improvements in new selling technique are being developed for self service stores; better lighting, improved store layouts, more attractive and informative labels,

store broadcasting, mixing harmonious music with interesting commercials at point of sales; television advertising in the stores and in the home; more planning and displays with more color in signs and other advertising; store demonstrations and other sales plans; all tailor-made to fit this modern type of food merchandising, all geared to sell more merchandise, improve the service to consumers and cut the cost of operation.



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Following their usual policy, the greater part of the economies effected in these many improvements by distributors are being passed along to consumers in the form of better values and services. Sales were higher in 1947 but because of increased operating costs and lower mark-ups percentages of net profits will be lower. As an illustration, in spite of increased costs and expenses of all operations, because of higher volume of sales, improved methods and facilities, the American Stores Company have been able to cut the mark-up between their costs and their selling prices 21 percent during the last seven years, and this is in line with other efficient distributors.

Food Distributors' Inventories

Food distributors' inventories, at the present time, are higher than they were a year ago at this time, but considered in proportion to present higher sales and prices, they are not too burdensome. And, with intelligent sales promotion on those items that are in abundant supply, we believe they, too, can be sold at present prices.

In the face of employment now hugging the 60 million mark and disposable income at an all time high, we could conclude by stating that we are afraid that there is nothing to be concerned about in food distribution in 1948.

But, turning from the brighter side, you canners will be interested to know prices and operation costs are still advancing; sales gains are much lower than they were a year ago. There is a pronounced and growing resistance

to higher food prices by consumers and they are becoming much more selective in their purchases. Unknown or up-graded brands of canned foods of doubtful quality are impossible to sell now, except at a loss. Full standards of quality will be a "must" in the future or packers can expect rejections.

More Space for Competitive Items

All classes of retail food distributors are giving more store space and selling effort to perishables, prepackaged fresh fruits and vegetables, frosted foods, fresh fish, bakery products, ice cream, prepackaged self serve fresh meats, etc. Distributors believe they provide more glamour and consumer appeal, take less inventory investment.

The increased store space for perishables, plus the space needed for the many new food products constantly coming on the market, and the many duplications added during the war, have created a crowded condition in warehouses and stores. And, we fear, in the smaller stores bottlenecks regarding the positive selling of many canned foods is an actuality. Because of these factors, distributors are screening their inventories, discontinuing many duplicate brands, stocked during the shortages, as well as eliminating all items that do not show sufficient sales volume to pay for the warehouse and shelf space used.

You, and we, will have in 1948 additional competition for the consumer's dollar, not only because of a tremendous increase in all consumer goods other than foods, but also you will have increased competition for the consumer's patronage and for store space and distributors' selling efforts from perishable foods, prepackaged fresh fruits and vegetables, frosted foods, etc.

Food prices have received more than their share of publicity in 1947. Government reports show that the average prices of all foods have just about doubled. Compared with the 1935-39 period a large part of this increase occurred during the past year; the largest advances were made in those foods affected by Government purchases for shipment abroad. These are wheat and other grains affecting meat, flour, bread, poultry, dairy products, cereals; fats and oils affecting shortening, mayonnaise, oleo; and basic foods, such as rice and beans. However, there are a great many foods sold in our stores today below 1946 prices; among them are most canned fruits and vegetables, fruit and vegetable juices, soups, tomato products, and many others. The prices of these products have advanced 44 percent less than the average price advance of all foods and show excellent value to consumers today.

We believe the canned food industry as a whole should take advantage of this present opportunity and advertise the convenience, the wholesomeness and big food value, the saving of fuel, as well as the economy of canned foods.

The present high employment, at good wages, assures both producers, canners and distributors the opportunity of maintaining and advancing the sales of canned foods in 1948. The same can be accomplished by better and increased selling efforts and by coordinating the selling power of food distributors and canners. The proposed industry advertising of canned peas is a step in the right direction.

But last and most important, the price structure and the size of the new packs of canned foods in 1948, I believe, should be approached with much caution and consideration. Higher carrying charges for seasonable packs support a larger differential between prompt and delayed delivery. Higher label allowances must be considered

to provide more attractive labels for both packers and distributors' brands; more substantial packing cases should be used. Increased acreage, labor and supply costs, additional transportation charges are all a certainty, but we should remember there is a price at which the consumer says "no" and when this little lady says "no" she does not take into consideration production or distribution costs.

I appreciate the opportunity of appearing on your program today and congratulate the canning industry on your achievements during the past seven years. We are all conscious of the great importance food plays in our national economy, as well as its importance to the people in foreign lands.

Food producers, processors and distributors are, I believe, better prepared than ever before to accept the responsibility of supplying our nation's food in 1948 in sufficient quantity and at the lowest possible prices consistent with good quality.

THE GROWER'S LABOR AND OTHER PRODUCTION PROBLEMS

By Lester C. Jones, President,
N. J.-Pa. Cooperative Tomato
Growers Association, Inc.

It was my privilege to attend the panel meeting last January. As I heard the discussions, I was struck by one fact in the economic picture which was painted. One speaker pointed out that processors' labor costs would undoubtedly increase. Another mentioned that the cost of cans and other supplies in 1947 would be higher than in 1946. A banker suggested that credit lines might be restricted and credit costs would rise. The single exception to the suggested parade of cost increases was raw material.

Frankly, this speech surprised me. As a grower—as a producer of the raw material for canning—I knew that my 1947 costs were also certain to rise. It seemed clear to me that fertilizer, fuel, agricultural containers, labor, farm machinery, repairs, in short, practically all costs I had were going up. Comparatively, I also knew the margin of profit in the contract growing of canning crops was one of the lowest prevailing for any crop or group of crops produced by farmers during the wartime period.

Increased Costs Anticipated

Once again, looking ahead to 1948, we as growers cannot foresee any lowering of our costs. Indeed, we have every reason to anticipate increased costs. Fertilizer, which to many of us is an essential item, has already risen in price. The cost of farm machinery, as well as the cost of main-

taining and repairing it, has been rising constantly. With the present scarcity of lumber, we see little hope for relief in the field box situation.

Most important, our labor outlook is bleak. Few in this room need to be told that farmers cannot count on unemployment rolls as a source for their labor. Nor can farmers realistically expect that city labor, or to some extent, even rural labor, will take jobs to harvesting canning crops. The past harvesting season was most difficult for even those growers whose crops did not require a great amount of harvesting labor. And last season, it must be remembered, the wartime farm labor program was still in effect.

If I stress this matter of labor it is only because of its importance to the grower and the canner alike. Government officials have estimated that some 60,000 to 70,000 foreign farm laborers will be needed in 1948 for agriculture as a whole to maintain its level of production. Moreover, this estimate assumes the most intensive recruitment and the most efficient utilization of all available domestic labor.

You will remember that under the wartime program, farmers were assisted in obtaining both domestic and foreign labor, which was often housed in federally-operated camps and trans-



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ported at Government expense. This program terminated on December 31. To use foreign workers in 1948, growers will have to underwrite almost prohibitive transportation costs, post various types of bonds, furnish housing, medical care and the like. To utilize domestic labor fully, workers should be transferred from one area of need to another, and from one crop to another in proper sequence.

While it is true that various government plans are under discussion, I am not too optimistic about how far they will go to meet the real problem; nor do I have any real hope that they will play any part in answering the question of farm labor costs to the grower in 1948.

Accordingly, as we enter 1948 it should be no surprise that a great many farmers in all sections of the country are going to ask themselves: "Shall I raise tomatoes (or beans, or sugar corn, or peas) or shall I, instead try to grow a little more wheat (or barley or corn)?" Not unnaturally, they will point out to themselves that the cost of growing these basic crops is less, the weather hazards are smaller, the worries of timely harvesting are less, the labor problem can be minimized, and the net return from producing these grains looks good. For those dairymen who are experiencing high feed costs, these arguments will be appealing.

Canner-Grower Interdependence

It is a commonplace that growers and canners are dependent upon each other. We look to you as processors for a large part of our market. Necessarily, you are dependent upon your growers for your very existence. Yet occasionally some of the processors have lost sight of this in dealing with their growers. Sometimes the grower has felt that the deck was dealt by the canner alone, and that the odds were not even.

Largely because growers have come to appreciate the importance of their canning market, they have come to be better informed about it. Information as to market conditions has become available to farmers and they can now sit down and discuss with their processors on a common basis the mutual problems confronting both. It is my feeling that the past few years have seen greater harmony and a sounder approach to these common problems. This has been advantageous to canner and to grower alike. It has assured the canner of an adequate supply of raw material at a fair price. It has given the farmer a good market for his production. More important, it has developed mutual respect and contributed to the solution of many problems which neither alone might have solved.

It is on this basis that I have pointed to the plain fact that in 1948 the costs

of producing canning crops will be high. Competition for acreage with high priced grain will be keen. The ever-present labor problem will be intensified, and inevitably there will be a tendency on the part of many growers to turn to those crops with lower costs of production because they require less labor.

Nevertheless, I am confident that, by and large, the growers of the country will, during the coming year, produce for you an adequate supply of

raw material at a fair price. They can and will do so at fair prices which reflect both their costs of production and market conditions.

The basic community of interest between canner and grower is coming to be better understood. The opportunity of cooperation between canner and grower which is thus fostered, will mean much for the betterment of the industry of which we both are a part and in the advancement of which we must be partners.

CONSUMER BUYING TRENDS

By E. N. Reusswig, Lestrade Bros.

Speaking on behalf of over 1,400 members of the National Food Brokers Association, I do want to express the gratitude and appreciation of our organization for the opportunity in participating in this panel discussion. It will be our hope to present briefly to you the broker's viewpoint on consumer buying trends or to phrase it more aptly in question form—has the demand for canned foods shifted during the war or postwar period?

I believe there will be general agreement on the premise that a change has taken place, but before analyzing the various trends, it would be prudent to keep before us some very important facts and factors which form the background for this changing condition.

First of all, as you have been told—and your charts show—Mrs. Consumer still has more money in her pocketbook to spend on food than ever before, and this, despite the fact that newspapers, radio commentators and economists are constantly, and to the detriment of the food industry, over emphasizing market fluctuations and price quotations on certain so-called basic foodstuffs. In other words, our national economy continues at a high level with every sign pointing to an upward trend during 1948. Another significant indicator is the fact that the *Farm Price Index*, as of the 15th of December last, hit a new all-time high, according to the Bureau of Agricultural Economics.

Inventory Total Food Resources

Pitted against this consumer demand and availability of spending monies is the over-all world food picture and the extent to which this country is to be called upon to furnish foodstuffs to foreign countries already befuddled by tariff barriers, monetary difficulties, governmental intrigue and many other obstacles. It is, therefore, going to be necessary to project a fairly accurate inventory of our total food resources, both actual and anticipated, in order to ascertain the limit to which Mrs. Consumer can spend

her food dollar to keep our national economy in proper balance, and, at the same time provide the needy peoples of the Western Hemisphere with necessary food-stuffs.

Treating with these two opposing points of view, namely, the over-all world food shortage and the rising spending dollar, it is refreshing from the broker's viewpoint especially, that the year 1947, just concluded, could aptly be termed the "Year of Transition." Like the old-fashioned house cleaning, the cats, dogs and ersatz qualities of yesteryear were cleaned up and fortunately forgotten, the pipe-lines of needed canned foods were filled, the old advertised favorites came back on the grocery shelves for ready consumer acceptance, and the food industry was wearing that "new look" of a transition well accomplished.

Keeping this background picture in mind, let us now analyze briefly a few of the changes that have taken place in the canned foods picture as seen through the eyes of the broker. It is not my intention here to amplify or glamorize the services and contribution of the food broker to our national food economy because, frankly, its past record speaks for itself, but inasmuch as most canned and processed foods are sold through food brokers and at a cost and service far lower than other sales mediums, it is to be conceded, we hope, that the food broker is in a position to be a reliable and trustworthy observer of changing conditions and trends in the food fields, and this is the way the food broker sees the picture today.

Coming back to our good friend, Mrs. Consumer, she has, and will continue to have, ample funds for canned foods, but she has become selective and discerningly critical in her buying. We think that she studies the advertisements more carefully for the



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purposes of comparative shopping. We believe she reads the labels more thoroughly to observe descriptive contents, number of servings, and can sizes. She wants intelligently to buy better quality canned foods, but on a best buy price basis. Well can food brokers remember but a few years before the war when it was routine to sell the standard grade of California cling peaches, but, oh, so difficult to consummate sales on the fancy and choice grades, but today, it is Mrs. Housewife, with her keener appreciation of quality and perhaps a realization of higher energy value in heavier syrups, who has reversed the picture in California peaches, and, for that matter, other fruits as well, to make the salability of standard qualities of fruits a much more difficult proposition for both the canner and his broker.

There is much to be praised in this searching for better quality canned foods. It is truly the goal for the industry—the guiding star of everyone, grower, canner, broker, distributor and consumer alike. I believe it can be truthfully put down as a vital part of the broker's creed—the truism that "there is always a market for quality." During the year just past, the brokers who had been participating in sales conventions and regional meetings with their principal, have been almost unanimous in emphasizing the quality angle of canned foods as being the most important factor to be mutually agreed upon for the 1948 program. It is even noteworthy that in the export field, the demand, while drastically reduced, has begun to center itself on more desirable attention towards qualities as against the old adage that "you could export any kind of offgrade merchandise."

Popular Can Sizes

Coupled with the quality angle, the broker has seen, chiefly in the larger markets, a desire on the part of Mr. Buyer and Mrs. Consumer to return to some of the small can sizes popular before the war. However, here again, a sensible and practical program of can sizes should be conservatively followed to avoid the prewar condition of a different size tin for every different price change. Undoubtedly, the tin conservation program will automatically adjust this situation, but again, it will pay the canner to be quality selective in the small containers because your customer will still be just as discerning for better grades of foodstuffs.

Another sign in the canned foods field, as seen through the broker's discerning eyes, has been the splendid advertising program launched through various State associations on such canned foods as peaches, citrus, and sweet potatoes, etc., etc., which have

presented to Mrs. Consumer many convenient advertising suggestions as to where she should spend her quality seeking dollar. More credit, too, goes to the trend of "tie-in" food advertising where closely related food items are all bound together in an eye-appealing sales clincher. At the present time, plans are underway for an extensive advertising program on canned peas and you can rest assured that this will have the enthusiastic support and cooperation of the food broker. The 1947 pack of peas in this country, while large, was equally of outstanding quality, and the pack has been so reasonably priced that Mrs. Consumer is getting excellent trade value in practically every purchase. Therefore, a concerted effort on the part of

the entire distribution field interested in canned peas should produce results and benefits for everyone.

Conclusion: Thus it is that the brokers see changes in the canned foods picture, but believe that they are the right kind of changes that bespeak betterment for the industry and the consuming public. It is to be conceded by all of us that 1948 will have its trying times, and it is a challenge as the year develops. The canned foods industry in this productive country of ours has always not only been equal to the challenge, but more often improved upon it. Likewise does your broker gladly accept the challenge for doing his job better, more efficiently, and for the best interest of everyone.

THE 1948 OUTLOOK OF THE FRUIT CANNER

By Robert C. Paulus, President,
Paulus Bros. Packing Co.

Although he is fully aware of the many present circumstances which appear to be favorable for a prosperous season, the thinking fruit canner weighs his prospects for the new year with a sense of uncertainty that could have a seriously adverse effect upon production this year.

From contacts with his distributors, he knows that jobbers' stocks of canned fruits will be practically back to a position of normal carryovers before new pack becomes available; also spot stocks, held by canners, are nominal and in view of probable higher replacement costs, are good property.

He is also aware of the increase in food requirements brought about by the European Rehabilitation program.

He is impressed with the fact that there is also at the moment a huge amount of money in national circulation—money the Government spent in carrying on the war—whereas during the recession following the first World War the circulation of money per capita was so small that there was not enough money to buy food and clothing without taking into consideration the multitude of manufactured products, the fabrication of which provides a large part of the national income under normal conditions.

He knows too, that personal income is at a high level and there is practically full employment and a backlog of unfilled demand—in most industries—which it will take more than a year to satisfy. Meanwhile home-building and construction work appear to be siphoning off all surplus labor as fast as it is released.

He also recognizes that further wage increases and prospective reductions in income taxes would also give consumers more money to spend and that contrary to the situation which existed

in 1929, greater personal reserves in savings accounts and war bonds as well as large Unemployment Fund Reserves all over the nation will extend the period considerably before unemployment actually begins to make itself felt.

Because of his close relationship with growers he realizes that aggregate farm income is at a high level—about four times what it was in 1939—and adjustments could take place in the prices of a number of farm products and still leave the farmer on a profitable basis of operation, whereas preceding the 1929 collapse farming was a severely depressed sector of the national economy.

Because of the effect upon his own cost of living the canner is acutely conscious of the fact that outside of cereal products which were affected by the European Relief Program, most of the inflation in food prices has been confined to perishables—meat and dairy products, fresh fruits and vegetables—which constitute over fifty percent of the volume in many food stores.

Canned Food Prices

The canner realizes that price-wise canned foods are not as far off of the prewar base as most other food items. The disparity in values of perishables compared with canned foods is undoubtedly increasing demand for canned foods, prices of which did not advance but were actually reduced last year. Fruit canners have reaped the benefit of their courage and ingenuity last year in avoiding reflecting in their prices the increases in costs which



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would have been allowable under O.P.A. pricing procedure.

An increase in population has also helped to increase consumption compared with prewar days. In addition to these factors, food habits of the American public are changing. As in the case of the automobile, the rich man's luxury of yesteryear has become the necessity of today. Canned fruits and other nutritionally protective canned foods are becoming a staple item of the American diet.

It is a matter of common knowledge among canners that following every war canned foods have arrived at a much higher volume of consumption and have not receded to the levels which existed before the war. For the years 1946 and 1947 combined, canned foods are showing an increase of 85 percent in consumption over the 1935-1939 average, as revealed in Chart III in the panel leaflet.

The above factors and many others are a composite of potent influences urging the canner to give his packing department the green light for large production during 1948.

Moreover, since the socialization of the world, and particularly the United States, began, through the use of various legal devices, the laws of economics with respect to supply and demand have, at times, to a certain extent, become inoperative, and a recession in foods, in some respects can be temporarily deferred by governmental purchases of offending surpluses. This being an election year, it will be politically expedient for both great political parties in the United States to see that no prospective voter is unhappy and accordingly all of the weight of Government is likely to be thrown against a tendency toward a recession should a definite trend develop during 1948.

Future Prospects

However, the fruit canner who survived the depression after the first World War, is fully aware that "all that glitters is not gold," that these and many other "signs of the times" are the "handwriting on the wall" and that these influential factors have within themselves the rapidly growing "seeds of their own destruction." Consequently, he is beginning to wonder if it isn't time to quit "looking at the world through rose colored glasses," and instead, to make a realistic examination of future prospects.

There have been periodic rumors of wars and predictions of recessions that have failed to materialize and some economists are blushing, particularly some in high places. It has been said in jest that an economist is a person who uses a preconceived set of figures to arrive at a predetermined conclusion. This type of reasoning

has apparently been used in connection with predictions as to the date of the beginning of a recession. However, it can be conceded that these predictions are not likely to fail forever and that when the voice of the business prophet is again heard in the land, with a cry of recession, he may possibly score a "bull's eye."

Longer Period of Leveling Off

A pattern for a recession includes a situation wherein a substantial segment of the population has had its buying power materially reduced, which is not yet the case. Just when the present trend will go into reverse is unpredictable. It is reasonable to assume that conditions will not follow exactly the same pattern as during the previous recession because the almost complete cessation of production of consumer durables during the war period has pyramided several years of consumer needs upon the normal requirements of the American public. It will, therefore, certainly require a longer period to overtake the leveling-off point than after the previous World War.

However, the pattern of inflation now being followed is ominously similar in many respects to the combination of circumstances prevailing on the "night before the morning after" which we previously experienced. At that time wage increases lagged behind price advances until the recession started, after which, wage reductions lagged behind price adjustments, the effect of which was to heavily inflate losses on inventories. Also, similarly, bank loans for carrying customers' accounts and inventories, are increasing heavily at present. In effect we are borrowing our future earnings to spend them today, further inflating present demand and impoverishing ourselves in the future, by reducing future consumption. How much effect the "boom and bust" prophecies are having on the situation is problematical, but the fact that bankers are alerting their business patrons all over the country to the need of inventories, balanced to demand, is a very favorable sign.

Another healthy indication is the present tendency on the part of a number of perishable foods which have been "priced out of the market" and have been taking more than their share of the consumer's dollar, to readjust themselves to price levels more nearly in line with the consumer's ability to pay. This will leave the consumer in a position to buy other needed goods, the manufacture of which will further extend the period of full employment.

Canners expected a falling off in demand when the war ceased but this failed to materialize. The canning industry is beginning to realize that the present unprecedented demand results

from a combination of increased consumer buying power due to high income levels and full employment, and the favorable price-position of canned foods. A demoralized market for a combination of competitive foods such as the so-called "drylines"—cereals, lentils, dried peas, dried fruits—as well as frozen foods, fresh fruits and vegetables, could upset his miraculously expanded market for the canner. However, the present distressed items in frozen foods and the low priced varieties of dried fruits have had practically no apparent effect upon the current canned foods outlet and there is no reason at the moment to expect any substantial effects from the drylines or from fresh fruit and vegetables because of the fact that the vegetable grower does not have to plant items for an uncertain market when he has so many sure avenues of income available to him through plantings of special seeds and foods to contribute to the European Relief program of the United States Department of Agriculture.

Consumer Purchasing Power

It is impossible to foresee the beginning of reduced consuming power resulting from creeping unemployment. The canner realizes that occasional pools of unemployment will develop as an industry, here and there, reaches the point of saturation of consumer demand and has to level off toward production for balanced inventories. He recognizes, however, that this is a regular phenomenon and prevails constantly under normal business conditions. While trends indicate that the economy of the country is moving in that direction, substantial areas of unemployment on a national scale are not on the present horizon.

Furthermore, it is hard to evaluate the extent to which a recession can be deferred, or relieved, by accumulations of unemployment funds, and particularly by personal reserves in savings and war bonds. "Scared" money is no respecter of persons, irrespective of whether it is in the reserves of corporations or individuals. When an employee is confronted with a situation where he faces the possibility of unemployment, or views the spectacle of a substantial number of his acquaintances out of work, he is not likely to withdraw his savings and spend them any more than a corporation would if its future existence were jeopardized.

The canner knows, however, from bitter experience, that during a period of shrinking income, the consumer, in his effort to make installment payments contracted during the inflation period, cuts his outlay for luxuries first, and then, for the common necessities of food and clothing, to an almost irreducible minimum, and the outlet for canned foods shrinks along with the demand for everything else.

The extent to which demand can disappear is illustrated by a story which was prevalent at the low point of the last recession when a food distributor was said to have greeted a competitor with "Hello Joe, how are you finding business?" The answer was "Not finding it, Frank. In fact, conditions are so bad that even the retailers who don't pay won't buy."

Past experience also has taught the canner that when consumer demand is substantially reduced, "hand-to-mouth" buying on the part of distributors, follows. This results in backing up the flow of goods from "first hands," quickly developing a transition from a seller's to a buyer's market. Cannerymen know exactly what impact that has on profits.

Use More Food in War

The thinking fruit canner is keenly conscious of the fact that since our capacity for food production has been so stimulated by war requirements that it is above our normal capacity to consume, it is inevitable that a readjustment must take place. He is wondering, therefore, whether the pain of this consequent readjustment could not be reduced materially if the adjustment were made piece-meal, under fairly favorable conditions, rather than in a drastic manner under very unfavorable circumstances.

The fruit canner knows that the frozen food industry is already going through postwar readjustment following a period of inflated production, and that some grades of canned vegetables may possibly need some downward readjustment in volume of pack this year.

The fruit canner feels that if consumer income is maintained at present or higher levels, barring a substantial increase in retail selling prices, with few exceptions there should be a market for practically all the canned fruit that can be packed. However, he is doing considerable wondering as to whether, in their future interest, fruit canners should hold their packs to a point in close proximity to their future orders, so as to minimize the possibility of inventory losses for both themselves and their distributors, in the event the down-turn in business arrives early in 1949, as, in some cases, is presently being predicted. In holding down his pack, he realizes that he will also somewhat relieve the inflationary pressure on his source of raw products.

Confronting the fruit canners in 1948 are higher costs of cans, cases, labels, labor, possibly an increase in raw product costs and higher transportation costs to their markets. In attempting to hold down their selling prices, canners will probably try to offset the unavoidable increases by squeezing additional wartime labor inefficiency out of their costs, and to

improve their case and grade yield by *not packing* the high-labor-cost low grades of fruits, all of which were utilized during the war period.

With increased costs elevating inventory values further above normal; with a possible reduction in the demand for foods after the stimulation of the European Relief Program has subsided; with the knowledge that the upward swings in business cycles have generally been long and gradual, whereas downward swings have been short and abrupt, and that, almost without exception, recessions have started during the low ebb in business in spring months; with business prophets advising long-range caution; and with the penalty for guessing wrong so great, the fruit canner is in a quandary as to just how far he should go in response to current demand for increased food production.

He looks back upon his experiences during the readjustment following the first World War and remembers the bankruptcies of a heavy majority of his competitors, the sickening shrinkage in his own working capital, and the long road back to comfortable solvency through years of intense low-

profit competition, and he is inclined to give more than average weight to the possible unfavorable aspects of the future.

He is keenly aware that after the first period of deflation following the first World War, there were a few years of somewhat profitable operations. He is inclined to believe that history will repeat itself in this respect. He is, therefore, impressed with the idea of attempting to keep his financial reserves intact to enable him to take full advantage of the opportunities for profitable use of them after the interim of the first readjustment period shall have passed.

In view of these conflicting conditions, the fruit canner is following the situation from day to day in a state of uncertainty, watching business barometers and listening to economists, sensing market prospects by more constantly consulting with his brokers and distributors, and listening to the warnings of his banker against packing surpluses, on the one hand, and weighing, on the other, the potential effect of the Marshall Plan on food requirements and debating the question of how far he can safely go.

SUMMARY OF 1948 CANNERS' PANEL

By Carl N. Lovegren, President,
United States Products
Corp., Ltd.

Well, there you are. You have had the views of two canners, the views of a distributor, a grower and a broker.

Let me summarize briefly the points of significance that I got out of these presentations.

Vegetable Canner

Mr. Henry P. Taylor, the vegetable canner, reminds us that we have had seven years when—in effect—we did not have to do any thinking, but that era is apparently gone. He points out how different the processing industry is from all other types of industry—how difficult it is for us to know what our actual costs are. He warns or infers that the canner is the eternal optimist before he gets his product into the can, and the eternal pessimist after it is in the can. He warns about over-ambition on the part of those who fail to analyze the conditions as they actually exist, his own ability to finance and warehouse, and points out how this over-ambition on the part of an individual, or a group of individuals, can not only destroy themselves but also jeopardize the entire industry. He says that if you have not been in business at least 10 years, you have not had the opportunity to see what a glutton for punishment a canner is; but he ventures the opinion that if you stay in business for a few years more,

you might have that opportunity. In effect Mr. Taylor wonders whether or not the individual canner is going to profit from the industry's past experience or slide back into the groove of being the same damn fool he had always been.

Lastly, Mr. Taylor points out that profits are not something to which you are *entitled*. He gives as evidence of what can happen in the face of splendid economic conditions, the unhappy situation that has developed in certain canned foods.

Food Distributor

Mr. W. H. Eden, the distributor, starts out his presentation in a most optimistic vein and I really felt quite happy about it. What's more, the further he got along in his discussion, the more restful my mind became. He points to the high level of employment, the high level of income, and the increase in population, which, coupled with other factors, suggests that the national economic boom will continue for at least the greater part of 1948. He mentions the improved facilities in distribution, enabling mark-ups to be



MR. LOVEGREN

reduced, all of which is beneficial to the consuming public.

This was all very optimistic and made me feel quite good, but, all of a sudden I felt somewhat deflated because he spelled out the severe competition we are going to have in interesting the consuming public in canned foods from perishables, from pre-packed vegetables, from frozen foods and many other commodities, and even more important, the reported tendency to give preference in store space to those commodities that, as he stated, provide more "glamour." Mr. Eden also stated that these competitive commodities do not require the distributor to carry as large an investment as do canned foods, which perhaps means that the processor is going to have to carry a substantial portion of the inventory. This immediately reminded me of Mr. Taylor's question, "Are you going to be able to carry that inventory?"

Mr. Eden says that in the final analysis the consumer will buckle up in the event the price, in her judgment, gets too high, and when the consumer says "No!" she isn't concerned at all as to whether or not you make a profit or a loss on your sale, for she gives no consideration whatsoever to production or distribution costs—and, he gives a very strong warning that the consumer is interested in quality products, and significantly says that the packers' deliveries to his buyers this year had better be up to the grade sold or he will be confronted with rejections.

Raw Products Grower

Mr. Lester C. Jones, the grower, stresses the fact of an acute labor situation and reminds us that during the war period the growers were helped by government agencies in the procurement of labor, that this procedure has been abandoned, and that it is now every man for himself.

It is not often that we have as forcefully put up to us the situation that affects the grower, but certainly that which affects us in the way of increased costs of material and supplies and increased costs of labor is bound to affect the grower. He warns that the grower is going to take a pretty good look at the various crops that he can grow and he is going to decide which present the least hazard and the best chance for a fair return, before he decides whether he will grow tomatoes, sweet corn, or peas or grains, but he does give an encouraging thought when he tells us that in his opinion growers will produce for canners an adequate supply of raw material at a fair price. He also reminds us that the community of interest between canner and grower must be fostered for the betterment of industry.

Canned Food Broker

Mr. E. N. Reusswig, the broker, with seeming modesty—and properly so—tells us how good they are. He confirms Mr. Eden's view that quality is essential and that the industry can count on the complete support of the brokerage fraternity in promotional activity in any respect that will tend toward an increased consumption of canned foods.

Fruit Canner

Our good friend, "Bob" Paulus, not unlike Mr. Eden, gives a lot of reasons why things are good and why we should be optimistic, but, also not unlike Mr. Eden, he sort of punctures us after he has us swelled up a bit. He suggests that the processor of fruit crops on the Pacific Coast remembers what happened after World War No. I when we had a period of so-called good times, only to be followed by many years of pulling ourselves up that long hill out of difficulties. He suspects that the canners are thinking in terms of a production that they are more

than reasonably sure they can market at a reasonable profit, than in terms of how much they can pack, with a possibility of a tremendous loss. He questions that the reserve of buying power can alleviate a recession. "Scared Money" as he put it, will not be spent by the individual any more than the corporation if his future existence is threatened. He also points out that it is a presidential year and that possibly in the case of distress, government assistance might come forth with some kind of help.

I wonder whether or not you think that the time hasn't come when one should take whatever losses may follow the use of his own judgment as against looking to Uncle Sam for assistance.

Well, as I said at the outset, there you are, and, unless the members of the panel have any questions they want to ask of one another, we will now receive questions from the floor. Because it is difficult to recognize everyone in the different parts of the auditorium, I ask each of you, who has a question, to state your name and to which of the Panel members the question is addressed.

Background Material for Panel

Industry Data Prepared for Panel Discussion

EDITOR'S NOTE: The following material, and accompanying charts, was prepared to furnish background information to canners attending the panel discussion, "Looking Ahead for 1948." It was compiled with the view that "looking ahead" is made easier if a study of the past is made. It is reprinted here in full for the benefit of the entire Association membership.

Disposable personal income (income less personal taxes) for 1947 will approximate 175 billion dollars or more than 2½ times the prewar level (Chart I). This chart, which also gives expenditures for food, shows the prewar average, 1941—the year prior to our entrance into the war, and the past four years. This is indicative of the increase in purchasing power that has occurred in the past decade.

Expenditures for food are triple the prewar level and during the third quarter of 1947 were at an annual rate of 47.6 billion dollars. In 1947 about 27 percent of disposable income was spent for food. This compares with 23 percent in the 1935 to 1939 period. Thus the increase in the number of

dollars spent for food is due not only to the increased purchasing power but also because people, in general, are spending a larger proportion of their income for food.

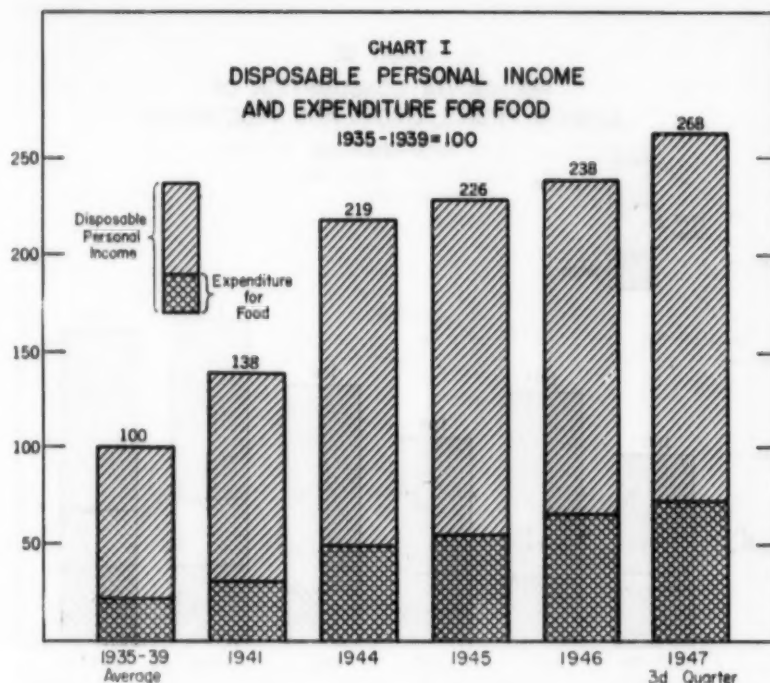
Disposable personal income and expenditures for food in billion dollars are shown below:

	Disposable personal income	Expenditure for food
— Billion dollars —		
1935-39 av.	66.6	15.4
1941.....	92.0	20.1
1944.....	146.0	31.8
1945.....	150.7	36.1
1946.....	158.4	42.9
1947(a).....	178.7	47.6

(a) Third quarter at annual rate.

The major part of the increased expenditures for food has been due to higher prices. Chart II shows the relation between per capita food expenditure and the cost to consumers of fixed quantities of food representing 1935 to 1939 average consumption. The latter represents the higher ex-

CHART I
DISPOSABLE PERSONAL INCOME
AND EXPENDITURE FOR FOOD
1935-1939=100



penditure due to price increases. The sharpest increase has been during the past two years. The difference between these two indices represents the increased expenditure due to what may be termed "changes in the standard of consumption." This includes such factors as the consumption of not only more foods in actual quantities but shifts in consumption to higher priced foods and an increased proportion of foods purchased as meals in eating places than took place before the war.

For further comparisons the per capita food expenditures and cost to consumers of fixed quantities of food representing 1935-39 average consumption are given below:

	Per capita food expenditures representing av. 1935-39=100	Cost of fixed quantities of food representing av. consumption 1935-39=100
	Pct.	Pct.
1935-39 av.	100	100
1940	109	95
1941	126	106
1942	157	126
1943	181	144
1944	193	144
1945	216	147
1946	254	170
1947(a)	278	211

(a) Third quarter.

Per capita civilian food consumption in 1947 is about 11 percent above pre-

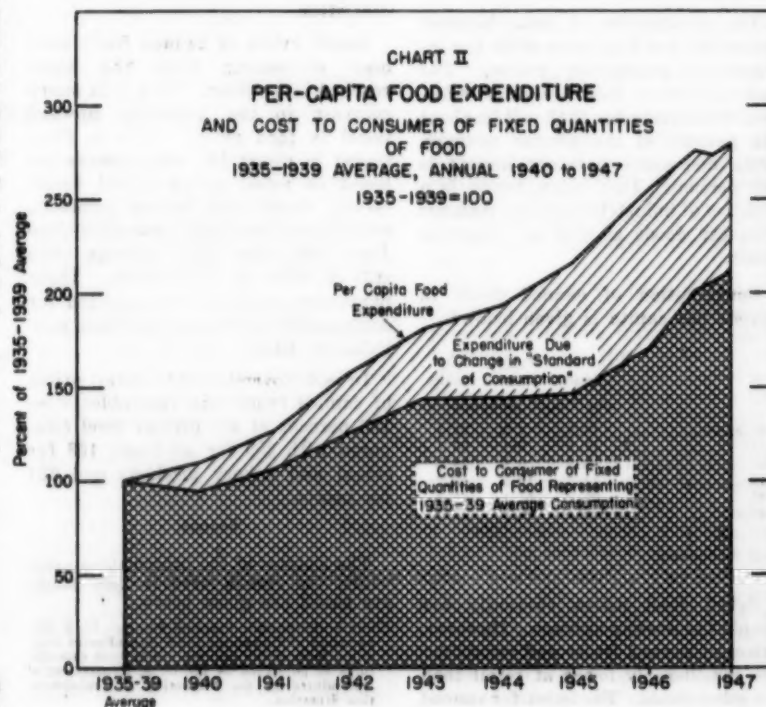
war on a poundage basis and about 17 percent higher on a price-weighted basis. There has been an increase in

the consumption of the so-called protective foods such as fruits, vegetables, dairy products, etc., and a decrease or relatively small increase in the consumption of such staples as potatoes, flour and grain products. The total volume of food consumed is larger than these per capita comparisons indicate since there has been an increase of about 10 percent in population.

United States food production in 1947 was 40 percent larger than in the prewar 1935 to 1939 period. This is approximately the same as the level of production of the past three or four years. Exports and army food shipments for relief feeding during 1946-47 accounted for 13.4 percent of the disappearance of food on a tonnage basis. Grains and grain products accounted for 80 percent of this total. The value of supplies for exports and relief feeding was a smaller part of total value than of tonnage, since chiefly low-cost high-calory foods were purchased for relief.

The pack of canned fruits, juices, and vegetables has increased more than has the total production of food. The 1947 pack is expected to total about 350 million cases exclusive of such products as soup, dry beans,

CHART II
PER-CAPITA FOOD EXPENDITURE
AND COST TO CONSUMER OF FIXED QUANTITIES
OF FOOD
1935-1939 AVERAGE, ANNUAL 1940 to 1947
1935-1939=100



spaghetti and baby food. This is slightly smaller than the record 1946 pack of nearly 400 million cases but 75 percent above the prewar average packs. The total supply for the 1947-48 marketing season, however, is expected to approximate the previous season's record because of a larger carryover.

One of the outstanding developments of recent years has been the increase in canning and other packaging of foods. Per capita consumption figures for canned fruits, juices, and vegetables are shown in Chart III for the prewar average, 1941, and the past four years. The consumption per person of canned fruits and vegetables for 1947 was nearly two-thirds higher than in the 1935-39 period. In comparison with Pre-World War I, per capita consumption has quadrupled. During the past two years consumption has been substantially above the war years as well as prewar. The lower consumption shown for 1944 resulted from heavy purchases for the armed forces. A slightly higher consumption is indicated for 1946 than for 1947. This is due in part to restocking of retail inventories since the figures take no account of changes in retail store holdings.

The production of manufactured goods has not kept pace with the increase in purchasing power. The *Federal Reserve Board Index of Industrial Production* for 1947 will be about 185 percent of the prewar average, while disposable personal income is 268 percent. This index, which is a measure of industrial activity, includes producer goods as well as consumer goods.

Consumption of canned foods in pounds per capita is given below:

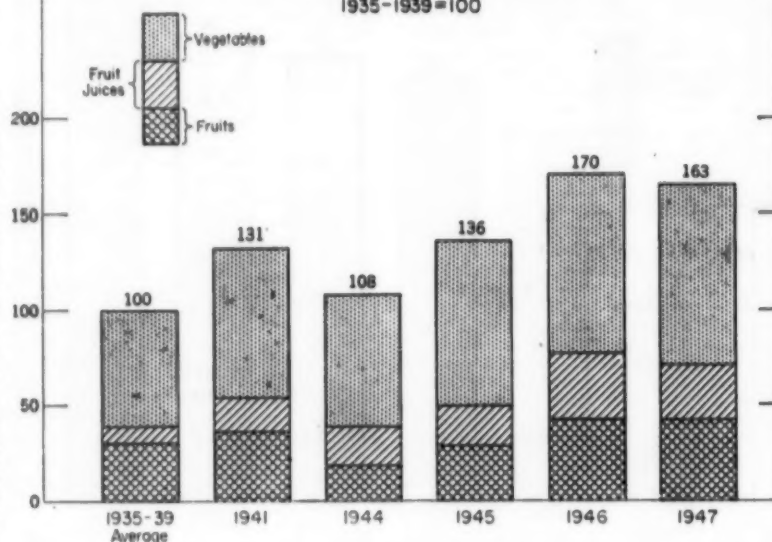
	Fruit	Fruit	Veg-
	Juices	juices	etables
	—Pounds per capita—		
1935-39 av.....	14.9	4.0	31.1
1941.....	17.9	8.4	30.1
1944.....	9.3	9.9	34.6
1945.....	14.7	10.3	43.2
1946.....	21.2	17.1	46.5
1947(a).....	20.5	14.5	46.6

(a) Preliminary.

Retail food prices currently are double the prewar average. However, prices of canned fruits and vegetables are considerably lower at retail than are other foods. The index for canned

CHART III
PER-CAPITA CONSUMPTION OF
CANNED FRUITS, JUICES AND VEGETABLES

1935-1939=100



fruits and vegetables has shown less increase over prewar than any other group shown by the Bureau of Labor Statistics.

Retail prices of canned foods have been decreasing from the highs reached last winter. This is in sharp contrast to the generally upward trend in food prices. This is illustrated in Chart IV, which shows the trend in retail prices of all foods, meats, cereal and baking products, and canned fruits and vegetables since June 1946 when price ceilings were still in effect on most foods. These particular products were selected for comparative purposes from those published by BLS.

In mid-November 1947, retail prices of canned fruits and vegetables were 156 percent of the prewar level compared with 203 for all foods, 168 for cereal and bakery products and 227 for meats.

Sources

The sources of the information upon which the charts used in this study are based are given below:

Chart I—Disposable Personal Income—U. S. Department of Commerce Food expenditures computed from above and per capita food expenditures as published by the U. S. Department of Agriculture in the Marketing & Transportation Situation.

Chart II—U. S. Department of Agriculture—National Food Situation.

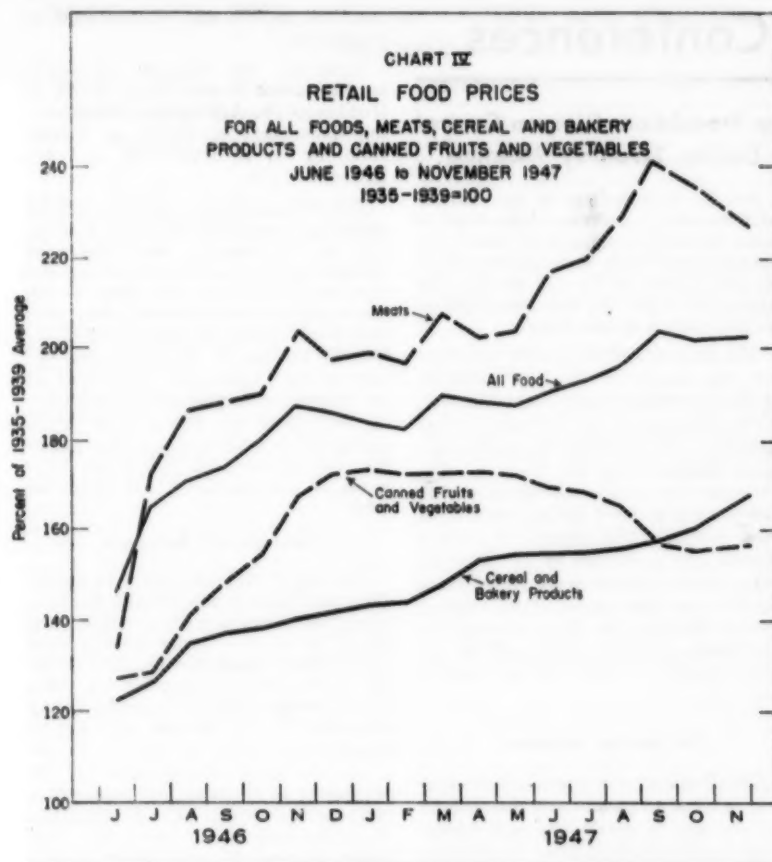
Chart III—U. S. Department of Agriculture—Marketing & Transportation Situation.

Chart IV—Bureau of Labor Statistics Retail Food Prices.

Index of retail food prices upon which Chart IV is based is given below:

	All foods	Cereal and bakery products	Meats	Canned fruits and vegetables
	—1935-39=100—			
	Pct.	Pct.	Pct.	Pct.
1946:				
June.....	145.6	122.1	134.0	127.5
July.....	165.7	126.1	173.7	130.9
Aug.....	171.2	135.4	186.6	140.7
Sept.....	174.1	137.3	188.5	148.7
Oct.....	180.0	138.5	190.7	154.6
Nov.....	187.7	140.6	203.6	167.7
Dec.....	185.9	141.7	197.8	172.6
1947:				
Jan.....	183.8	143.4	199.0	173.6
Feb.....	182.3	144.1	196.7	172.6
March.....	189.5	148.1	207.6	172.9
April.....	188.0	153.4	202.6	172.6
May.....	187.6	154.2	203.9	172.3
June.....	190.5	154.6	216.9	169.7
July.....	193.1	155.0	220.2	168.5
Aug.....	196.5	155.7	229.8	165.7
Sept.....	203.5	157.8	241.9	167.3
Oct.....	201.6	160.3	235.5	165.2
Nov.....	202.7	167.9	227.0	166.3
Dec.....	(a)	(a)	(a)	(a)

(a) Not available.



Association Office Facilities at Convention Hall

Following the recommendation of the Convention Committee, approved by the Board in November, the Association established its Convention offices in various rooms in Convention Hall, instead of at a headquarters hotel.

An Information Office was maintained at the entrance to the Exhibit Floor, in booth space donated by the Canning Machinery & Supplies Association, and shared by information clerks from that organization and from the National Food Brokers Association. Here N.C.A. staff members answered questions regarding locations of firms, individuals, meeting schedules and furnished miscellaneous other items of information. This office passed out a supply of Convention programs, hotel room directories, and various N.C.A. publications. The booth was decorated with a display of the Labeling program.

On this floor also the N.C.A. Motorized Field Unit (laboratory trailer)

was placed on display in a special booth. Manned by Association personnel who were present to answer questions and explain the functions of the mobile laboratory, the exhibit was heavily patronized and elicited great interest.

Association headquarters were established in three large and beautifully-equipped rooms on the Ballroom level. Ample space and furniture was provided for canner-visitors and for conferences between them and staff members. The reception desk in these quarters handled the routing of inter-office telephone service and also functioned as another information center.

The N.C.A. Press Room was located nearby and contained space for interviews and conferences with reporters and editors; a work room equipped with phones, telephones, typewriters, desks and facilities for the use of press representatives, including a direct telegraph wire; and a duplicating room. Addresses and statements were

run off, as fast as delivered, and copies of these as well as photos, captions and biographies of speakers and officers made available to the more than 100 representatives of newspapers, magazines and wire services who were covering the Convention. Press releases were issued daily.

The Research Laboratories, Association Counsel, and Fishery Products Division occupied separate offices, available in each case to canners for conferences with members of the staff and for special information and assistance.

Also in this area offices were set up for the use of representatives of the Department of Agriculture, U. S. Employment Service, U. S. Fish and Wildlife Service, U. S. Department of State, and U. S. Quartermaster Corps.

Meeting room facilities were provided for the Raw Products, Fishery Products, and Canning Problems Conferences on the floor above.

Also the Association arranged, through the managers of the six hotels allotted to N.C.A., for the accommodation of some 75 various luncheons, dinners, meetings and other affairs which required the use of the public rooms of the canner group of hotels.

BUILDING STRENGTH

(Concluded from page 41)

canned foods, and described the new scientific "human guinea pig" methods of measuring the appetite appeal of foods.

Sessions were concluded with the showing of motion pictures on the manufacture of tin plate for cans, starting with the steel slab and ending with the finished can of food, disclosing the methods by which many tons of scarce tin were saved during World War II.

Following the practice initiated at the 1946 Convention and repeated last year, the complete text of the papers presented at the three canning problems conferences will be printed as a Supplement to the INFORMATION LETTER in the near future. Separates of the individual papers will also be available from the Washington Research Laboratory after the appearance of the Supplement.

Three other Conferences also were held during this Convention. On Monday and Tuesday afternoons, in Room 21, Convention Hall, Raw Products Conferences were held, and these are reported on pages 54-60. On Monday afternoon, in Room 20, the Fishery Products Conference was held. Details of this session start on page 60.

Raw Products Conferences

Canners Hear Experts Discuss Crop Production, Disease Control and Other Technical Subjects During Two-Day Meeting

Two Raw Products Conferences were held during the Convention, the first on Monday afternoon, January 19. This session started off with an address by Dr. T. C. Allen, Chairman of the Department of Economic Entomology at the University of Wisconsin, on "Insecticides—Their Uses, Limitations and Residue Hazards." His paper is reproduced in full below.

This discussion was followed by a later presentation by Dr. A. C. Foster of the Bureau of Plant Industry, Beltsville, Md., on the effect of accumulation of insecticides on the soil and their deleterious effect on plants growing in the soil. His presentation was effective in that it pointed out the necessity for the application of insecticides according to recommendations so as to avoid excess accumulation in the soil.

Dr. B. G. Chitwood of the Division of Nematology, Bureau of Plant Industry, led the discussion on the control of nemodes in the soil by fumigation. His paper is reproduced in full below.

Panel Discussion

A panel discussion followed on the control of canning crops insects. The discussion leader on the control of European corn borer was J. W. Apple of the Illinois Experiment Station, who reported on work being conducted there on the control of the European corn borer by the use of insecticides applied with ground machines and by air power. Dr. L. P. Ditman, of the Maryland Experiment Station; Dr. B. B. Pepper of the New Jersey Experiment Station; and Dr. T. C. Allen of the Wisconsin Experiment Station, also discussed their experiments and recommendations made in their respective areas on the control of this insect.

W. H. White, in charge of vegetable crop insect control of the U. S. Bureau of Entomology, was discussion leader on the control of pea insects. Mr. White discussed the experimental work of the Bureau on the control of the pea aphid, and was ably assisted by Drs. Allen, Pepper, and Ditman.

Dr. T. A. Brindley, of the Bureau of Entomology and the Idaho Experiment Station, discussed in detail the experimental work that has been done on the control of the pea weevil, and presented in full the recommendations on the control of this insect.

The control of bean insects was gone into thoroughly by Dr. L. P. Ditman of the Maryland Experiment Station; L. W. Brannon of the Bureau of Entomology and Virginia Truck Experiment Station; and Dr. Pepper. Dr. Ditman went into some detail on his new aerosol method for the control of bean beetles. The control of tomato insects was discussed by Dr. Pepper. Numerous questions were raised from the floor on the control of the various insects during the discussion panel, and many comments were made on the effectiveness of some of the control methods.

The Tuesday Conference

The Tuesday afternoon Conference was devoted to papers and discussions on the use of machinery and equipment in the mechanization of production and harvesting of canning crops, especially from the standpoint of cutting down field costs.

J. F. McGovern, Chairman of the Legislative Committee and first vice-president-elect of N.C.A., gave an address on the agricultural labor situation.

A. W. Turner, Assistant Chief, Bureau of Plant Industry, Soils and Agricultural Engineering, presented a paper on "The Status of Agricultural Engineering Research." Mr. Turner's presentation is published in full below.

These addresses were followed by a discussion panel on equipment and ideas for development of new types of equipment in the various fields of production and harvesting of canning crops. Sweet corn harvesters were discussed by D. R. Montgomery of the Fairmont Canning Co., who is Chairman of the Technical Committee, which has done excellent work on encouraging the development of these machines for 1948. Mr. Montgomery's talk was followed by discussions from

the floor on the use of this type of equipment.

Spraying and dusting equipment was discussed in some detail by O. K. Heddon of the Agricultural Engineering Laboratory of USDA at Toledo, Ohio, by G. B. Burkhardt and Dr. Ditman.

These discussions were followed by numerous comments from the floor by men in the industry who had used various types of ground machines, and also discussion from the floor of airplane application of insecticides. Mr. Burkhardt presented somewhat in detail, by the use of lantern slides, the new aerosol equipment developed at the Maryland Experiment Station for the control of pea aphid. The development of this same type of equipment for the control of European corn borer is contemplated for 1948, he said.

Equipment and Techniques

The use of various types of equipment and techniques for the application of fertilizer was discussed in some detail by C. H. Nisley of the New Jersey Experiment Station, Ben Counter, Fort Lupton Canning Co., and J. B. Barnard of the Minnesota Valley Canning Co. There was also extensive comment from the floor on the use of various types of equipment for the placement of fertilizer on peas, corn, beans and tomatoes. The development of cutter-loaders for peas was discussed in some detail, and the experiences of men in the industry who had used the Porter cutter-loader were given, as well as experiences on home-made equipment for this purpose. There was considerable interest in the development of equipment for the mechanization of production and harvesting, and the discussions were stimulating in that new ideas and suggestions were given, which should be of value to the men working in this field.

Raw Products Dinner Meeting and Conference

A dinner meeting and conference was held Monday evening of the Convention for members of the canning industry actively engaged in working with farmers, to discuss possible methods of improving canner-grower relations. Various ideas and techniques which might possibly be adapted and used by canners in various parts of the country were discussed in some detail. This meeting was for the purpose of exploring possibilities of approaching this problem, and no reports were prepared or will be issued.

INSECTICIDES—THEIR USES, LIMITATIONS AND RESIDUAL HAZARDS

By T. C. Allen, Department
of Economic Entomology,
Univ. of Wisconsin

Since the start of World War II, chemical means for destroying insect pests have advanced almost beyond our imagination. Although the use of insecticides has long been an important approach to problems of insect control, few materials in the past have had the high insecticidal value of some materials now in common use. Furthermore, they have not been so readily available.

Promising as some of these new products are, the entomologist has usually been inclined to act cautiously in predicting the outcome of their future usefulness. Consideration must be given to the possible development of hazards that might accompany the application of incompletely tested materials. It is important to know the effects of such products on plants and animal life and its associated problems, as well as to have a convincing knowledge of their insecticidal value. Consequently, old and long established insect control practices such as mechanical, cultural, and biological means for reducing insect infestations should not be forgotten.

Prower Insecticides

Prower insecticides were conveniently divided into two groups. First, those that acted as stomach poisons, and second, those that killed by contact. Stomach poison insecticides were applied to surfaces upon which the insects fed, and insects with chewing mouth parts were poisoned when they fed upon treated areas. The stomach poisons had little effect on insects with piercing and sucking mouth parts.

Contact insecticides were designed to kill insects that feed by sucking up liquid foods. Thus the method of killing this type of insect depended on application of the insecticide to the insect body. Soft bodied pests such as aphids were commonly controlled by contact insecticides.

Most of the newly developed synthetic compounds possess both stomach poison and contact poison effects. Therefore, they are not only more highly effective but have a much wider range of usefulness. They are toxic to a large number of insects and are quite stable; hence they remain effective for long periods of time. Some of these new materials have no objectionable odor and cause no irritation in handling, but they vary in toxicity to plants and to man. However, they still lack certain essential characteristics of a highly desirable insecticide.

Essentials of an ideal insecticide—Materials for successful use in controlling insects must have, in the main, several important essential properties. It is important that insecticides be highly toxic to pests, they should not be harmful to plants or higher animals, and they should possess stability. In addition to the above qualities, an insecticide should also be cheap, readily available in large quantities, and if possible, have no objectionable odor or irritation. Few, if any, of the materials available to date have entirely met all these requirements.

Insecticides derived from plants—Insecticides derived from plants, such as nicotine, pyrethrum, rotenone-bearing materials and others have been an important source of insecticides. These products tend to deteriorate quite rapidly and consequently leave little or no poisonous residues. The fact that applications of plant insecticides can be made to crops prior to harvest with little fear of contaminating plant tissue with poisonous residues has made these products very important insect toxicants. Some of them are considered among the least toxic to man.

On the other hand, plant insecticides are rather specific in their toxicity to insects and they are often toxic to only a limited number of species. In general, they are known to be less effective than the newer synthetic insecticides. For many uses they, as well as such materials as the arsenicals, have met considerable competition from the insecticides now being made available.

Highly Effective Chemicals

There are a number of highly effective chemicals of this nature in the making. Many of them appear quite adaptable for immediate use and the need for an intelligent understanding of them by the grower or producer is at hand. Some general remarks relative to the more promising new insecticidal materials may be helpful.

Some promising new synthetic insecticides—DDT and its related compounds were probably the first important new insecticidal compounds that appeared during the war period. Considerable work by entomologists and others was devoted to DDT and at the present time analogues such as DDD and methoxy-DDT are available. We are all quite familiar with the merits of DDT as an insecticide and we are learning much about its possible limitations on plants and animals. As in the case of all the synthetic chemicals to be mentioned, we find DDT more toxic to one kind or group of pests than to others.

Benzene hexachloride, frequently referred to as 666, has recently received attention by various workers. This chemical has proven quite outstanding in its toxic action to many pests. At present, however, much criticism is being directed to its objectionable odor.

Chlordan, a recently developed compound, first known as 1068, and chlorinated camphene are now being made available. These materials appear to possess toxicity to many insect groups.

The latest compounds now being made available for widespread insecticidal testing are the phosphate compounds. These chemicals have high insecticidal potentialities and were brought to light through European development. They were apparently developed for purposes other than insecticides (mainly oil conditioners) and they are available and referred to as Parathion. Early trials with these products have disclosed that they are particularly toxic to mites and aphids.

Usefulness of Insecticides

Insofar as the agriculturist is concerned, there are not many properties of insecticides that limit their eventual usefulness. Other than being toxic to pests, it is important that the insecticide be harmless to the plants. Application of some chemicals to plants in sufficient concentration may cause not only decreases in yields, but detrimental effects on the texture and quality of the crop. Such damage may be expressed in various ways. A sudden wilting or browning of tissue may occur or a slow accumulating damage may develop. The latter may be expressed by plant discoloration, dwarfing or various deformative effects. Probably the chronic effects are the most serious since they are often difficult to distinguish, and as plants vary in susceptibility to chemicals, we should be aware of such possibilities.

An insecticide should also be harmless to man and animals. The possible poisonous hazards of insecticides are now being thoroughly studied. No doubt this hazard has been accentuated by the residual properties so characteristic of some of the new insecticides. A lasting deposit of toxic residues on surfaces has contributed greatly to the value of new insecticides. At the same time this advantage has created a more difficult problem in possible food contamination.

How serious is the problem of poisonous residues? Much depends upon the degree of toxicity of the chemical. It is true that an animal can obtain toxic dosages of some insecticidal materials if direct applications are made to the body. An animal, by feeding on contaminated plant products, can accumulate some of the chemical within the body. Traces of the chemical may also appear in the milk of animals fed on contaminated feed.

In the case of plants, it has recently been reported that characteristic odors of certain insecticidal materials can be detected in plants grown in treated soil or in aerial parts of the plants treated with certain compounds.

The importance of these disclosures are startling and may be rather significant. On the other hand, we have coped with the residue problem since the early days of the arsenicals. Government regulatory agencies have functioned proficiently in establishing protective tolerances. Looking to the future this all means that we are still in need of the continued services of trained workers for the proper evalua-

tion of insecticidal materials. You of the canning industry can expect a helping hand from the fields of entomology.

Some beneficial effects of insecticides on plants—In this discussion it appears timely to include also the possible benefits to plants which may develop from the use of new insecticides. Up to the present, little consideration has been given to the possible beneficial effects of insecticides on plants. Certainly if an insecticide can initiate some activity in a plant that will improve its quality as well as destroy its pests, such possibilities should be given serious consideration.

SOIL FUMIGATION TODAY

By B. G. Chitwood, U. S.
Department of Agriculture

Chemicals have been used for the fumigation of nematode infested soils for many years but little of practical value was accomplished prior to the development of chloropicrin, then dichloropropene mixture and ethylene dibromide. Doubtless still other chemicals will be developed.

The economic purpose of soil fumigation is to provide the grower with a net profit. Control of soil borne plant parasites will often do this. The utopian soil fumigant would be equally effective as a nematocide, bactericide, herbicide, fungicide, insecticide, extremely inexpensive and harmless to growing plants. No such product is known, and we doubt that it will be developed.

Soil fumigants are not designed for the disinfection of growing plants; special therapeutic treatments must be used for this purpose. We must learn the nature and type of the organism, whether or not the grower's disease problems are soil borne, and finally the value of the crop. Recommendations must be made in the light of these facts.

Chloropicrin has found little favor in the fumigation of field crop soils but in the fumigation of greenhouses, seed beds and potting soil, its all around efficacy as a fungicide, weed killer and nematocide has given it a firm position in the agricultural field. Dichloropropene mixtures and ethylene dibromide both appear superior to chloropicrin as nematocides but somewhat inferior as fungicides and weed killers. Low costs of these two products place them well within the reach of vegetable growers and today tens of thousands of acres of pineapple, sugar beet and lima bean soils are being treated as a strictly profit making enterprise. The tobacco and cotton farmers are now becoming interested in soil fumigation. It is true that there have been occasional fail-

ures, but on the whole such treatments have increased yields to an extent that growers have made a satisfactory profit on the soil fumigation dollar.

We feel the day is not too distant when soil fumigation will be as regular a procedure as spraying or dusting. Soil fumigation is still a skilled trade. The nature of disease agent, temperature, moisture and soil texture must be given consideration. The time of year and field conditions necessary must be worked out in each area. The value of each crop and the benefits from soil fumigation must be balanced. Row or hill fumigation may be the economic answer for many field crops such as cotton and melons. This permits the establishment of a healthy plant before nematode attack. When that is done, the battle is half won.

The mere presence of nematodes, even marked galling at harvest, is not in itself evidence of nematode crop reduction. Extreme cases of reduction in yields caused by nematodes are usually associated with mass invasion of roots, often when the plant is still in the seedling stage. These larvae kill many of the roots but not necessarily the entire plant. As a result, an undersized plant may be produced and likewise a reduction in yield. By

harvest time there may not be evidence of nematode existence, and for this reason losses due to nematodes may easily be overlooked.

Field Fumigations

Field fumigations cannot be expected to succeed if the gases are improperly applied or weather conditions are unsatisfactory. In some instances, it may be necessary to use a double treatment, turning over the soil between treatments in order to eliminate the effect of surface escapement. The length of time a given chemical will remain in the soil is highly varied. No one can dogmatically state injury will be avoided by delaying planting a certain number of days. This is still a matter of judgment which must be based on experience under similar conditions.

Little benefit will be attained if infected plants are placed in treated soil. We can justify extreme cleanliness in the tomato and tobacco seed bed, for it is here that the plant can sustain its greatest injury and no amount of field control is a substitute for clean plants.

Dose rates of the three leading soil fumigants, chloropicrin, dichloropropene mixtures and ethylene dibromide mixtures (10 percent by volume of active ingredient), are variously recommended according to locality and crop. In general the amounts applied have been 200 to 500 pounds per acre. A point of diminishing returns is generally reached. Treatments 75 to 90 percent effective may be more economically sound than treatments 99 percent effective in nematode control. Selection of dose rates must be made by the farmer with the advice of his local experiment station.

The following companies market soil fumigants and are in a position to apply the chemicals with their own equipment or to recommend local agricultural service companies which will apply the products on an acreage basis:

Active ingredient	Trade Name	Company
Chloropicrin	Larvacide	Innis Spelden & Company 117 Liberty St., New York 6, N. Y.
Dichloropropene	DD	Shell Chemical Company 100 Bush St., San Francisco, Calif. and 500 Fifth Ave., New York 18, N. Y.
Ethylene dibromide (10% by volume)	Dowfume N Iscobrome D	Dow Chemical Co., Midland, Michigan Innis Spelden & Company 117 Liberty St., New York 6, N. Y.
(20% by volume)	Dowfume W 10 Soilfume 80-20	Dow Chemical Co., Midland, Mich. Westvaco Chlorine Products Corp. 405 Lexington Ave., New York 17, N. Y.
(20% by weight)	Soilfume 60-40	Westvaco Chlorine Products Corp. 405 Lexington Ave., New York 17, N. Y.
(40% by weight)	Bromofume 20	Eston Chemicals Inc. 3100 East 26th St., Los Angeles 23, Calif.
	Dowfume W 40 Bromofume 40	Dow Chemical Co., Midland Mich. Eston Chemicals Inc. 3100 East 26th St., Los Angeles 23, Calif.

THE STATUS OF AGRICULTURAL ENGINEERING RESEARCH

By Arthur W. Turner, Bureau of Plant Industry, Soils, and Agricultural Engineering

This opportunity of talking to the National Canners Association about the application of engineering in the field production of the products you process is one that I deeply appreciate. Engineering in agriculture is something in which we have mutual interests.

In our approach to this subject my one concern is that we use the same language so that we understand each other. I am reminded of a situation that occurred during the height of the Pacific war. The story is told that a seriously wounded American soldier was hurried to Australia for hospitalization following one of the island invasions. Badly wounded, he was unconscious during the flight to the big British dominion down under. Shortly after hospitalization he came out from the coma and realized where he was. As he opened his eyes a questioning expression crossed his face, and in a frightened voice he inquired of the pretty nurse, "Did they bring me here to die?" Promptly and very properly in her best British manner, she replied, "Not to die, but yesterday."

I am sure, however, that we will not have that difficulty of understanding, especially if I am reasonable about the segment of the subject I am to discuss. Engineering in agriculture is an extremely broad subject. Dr. W. V. Lambert, administrator of the Agricultural Research Administration of the Department of Agriculture, has stated that 85 percent of all agricultural research has engineering implications. That alone indicates some idea of its importance.

Engineering has done much for the factory side of the food-canning industry just as it has for all manufacturing, transportation, communications, and construction. It can do just as much in field operations on the crops that the canning industry processes.

Phases of Agricultural Engineering

Let me mention here briefly various phases or activities in agricultural engineering. Among these are:

(1) Development and application of farm power and machinery, a phase that is probably of most interest to this group.

(2) Farm buildings and rural housing, including structures for storage and conditioning of grains and fresh commodities, both on the farm and during transportation and marketing, animal shelters that contribute to more efficient production, and farm houses for greater comfort and convenience in farm living and operation.

(3) Farm electrification, including the application of electric energy as heat, light, radiation, and power.

(4) Mechanical processing of farm commodities, including methods of engineering in rural farm industries, and

(5) Soil and water conservation, including erosion control, drainage, and irrigation, in order to increase production and protect our basic resource.

Place of Engineering

Now, in order to visualize the place of engineering with respect to individual crops, let's consider field corn and fruits and list the various engineering operations:

First, field corn: Seed grading and treatment; seedbed preparation; precision planting; fertilization or plant-food placement; weed control that may be mechanical, flame, chemical, or combinations of these three and mulch-cultural practices; insect pest and plant disease control; green corn harvesting and storage for silage, including both chopping and handling equipment and silos; harvesting of mature corn, conditioning it for storage, cribs or structures for storage; shelling, shredding, grinding, and feed mixing; storage of corn prepared for feeding facilities; and transportation equipment.

And now fruits: Preparation of the nursery seedbed, planting the seed or cuttings, growing the seedlings, supplemental irrigation, cultivation, digging of nursery stock; preparation of planting sites, transplanting to the orchard, orchard cultivation; placing of the fertilizer or plant food; insect pest and plant disease control; picking, grading, washing, drying, and refrigeration of the fruit; handling and packaging, refrigeration in transit, and facilities for marketing the fruit.

Similarly, there are engineering operations, I am sure, in connection with sweet corn, peas, beans, and all other fruits and vegetables produced for canning or for fresh or frozen markets. An industry of 1,850,250 acres of specialty field crops in 1947 also must have many problems demanding mechanization research. The breaking down of that over-all acreage figure shows the acreage of various processed commodities to be 73,990 in asparagus, 101,860 in snap beans, 10,900 in beets, 9,430 in cabbage for sauerkraut, 485,390 in sweet corn, 125,570 in cucumbers, 427,660 in peas, 24,090 in spinach, and 499,170 in tomatoes. The acreage in each of these commodities seems sufficient to warrant expanded cooperative research on the agricultural engineering phases.

The objectives of engineering applications and research may be summed up as (1) precision planting of high-quality seed and seed stock, (2) full product recovery through efficient harvesting, and (3) quality

control through proper methods of production, storage, and handling.

In working toward these objectives, the agricultural engineer is a key figure. In the Department of Agriculture, for example, agricultural engineers cooperate on many types of research with these goals in mind. Agricultural engineers work with the Bureau of Entomology and Plant Quarantine; the Bureau of Agricultural and Industrial Chemistry; the Divisions of Fruits and Vegetables, Soils and Irrigation, Cereal Crops and Diseases, Forage Crops and Diseases, and Nematology in our own Bureau of Plant Industry, Soils, and Agricultural Engineering; the Divisions of Foods and Household Equipment in the Bureau of Human Nutrition and Home Economics; the Soil Conservation Service; the Bureau of Animal Industry; and the Bureau of Dairy Industry.

The cooperative efforts of agricultural engineers extend to all the State agricultural experiment stations. This is necessary and logical in order to have available a wide range with respect to soil, climate, and pest conditions on all commodities. Furthermore, available in this research as consultants and in some instances as actual cooperators are the members of the State engineering experiment stations. It is through this well coordinated nation-wide organization of facilities and personnel that it is possible to include in the research on agricultural projects specialists in any subject matter or science that may be involved.

Two Types of Research

Agricultural research, both State and Federal, is largely public service research. Public service research is directed first of all toward solution of basic or fundamental problems. The problems of basic research in engineering are those that are common to a group of producers or groups of manufacturers. It is the job of public service research to develop the basic data. Once this is available, producers and industry apply it through individual practice or industrial developments.

Public service engineering research of the fundamental type is well illustrated in the fertilizer placement project of our Division of Farm Machinery. As I see it, this project is very much "on the beam" as a responsibility of a public service agency. Agricultural engineers on this work have the active cooperation of other scientists in the Bureau of Plant Industry, Soils, and Agricultural Engineering, the State experiment stations, and representatives of the fertilizer and farm equipment industries.

The objective of the fertilizer placement research is to determine by experimentation the best location or area to place each type of fertilizer or plant food with respect to seed,

seedpiece, or transplant. This placement may vary because of such factors as composition of fertilizer, type and condition of the soil, kind of crop, root characteristics, climate, soil moisture conditions, and similar factors. Determinations of the most advantageous locations for fertilizer placement can be made only through the cooperative efforts of specialists in a number of sciences—engineering, soils, plants, and fertilizer chemistry. Alone, no one group could develop final and conclusive answers. It is this type of work that is generally accepted as the responsibility of the public service research agencies.

Some States carry on application studies with producers and with industry. In the main, however, when the proper zone for fertilizer placement has been determined for each commodity, the physical application of these fundamental findings in the design of equipment for placing the fertilizer is the task of equipment manufacturers.

Other Phases of Industry Cooperation

Another phase of our cooperative relations with industry is to assist in expediting application of the research results so that they may be of aid to producers at the earliest possible time. To this end, our Divisions of Agricultural Engineering have sponsored and encouraged conferences between research engineers and scientists and industry and between groups in industry where there are problems of common interest.

A conference held last fall in Toledo at our Insect Pest and Plant Disease Control Machinery Laboratory will illustrate my point. It included representatives of the Agricultural Insecticide and Fungicide Association, the Farm Equipment Institute, Federal and State agricultural engineers and entomologists. The common interest of these groups is to place in the hands of the producers the most effective possible tools and materials for controlling the pests and diseases that annually take a tremendous toll of farm crops. The chemists and chemical manufacturers realize that the efficient use of their products depends on proper application, either by hand, ground, or airborne equipment. The manufacturers of application equipment cannot design and manufacture efficient machines without knowing the chemical characteristics of materials now in use and under development. The close association of the four groups mentioned, through the formation of a liaison committee, should go far in assuring the farmer who buys a pesticide applicator and the recommended chemicals that they will accomplish the job intended.

Applications of engineering in crop production, harvesting and processing are tending to eliminate weather hazards. Controlled mechanical planting, uses of new methods of weed control

through flame and chemicals, and development of drying or conditioning facilities are giving the producer the means for planning his season's operations with greater skill than ever before. The day of sun drying of forages and other commodities with consequent heavy losses in nutritive elements through bleaching and other weathering action is now giving way to mechanical conditioning—dehydrating in some cases, refrigeration in others. Application of these new techniques will result in improving the quality of products marketed.

Some Agricultural Engineering Problems

At this time there are many important questions under consideration in agricultural engineering research. Here are just a few of them:

1. What new equipment and changes in method are needed in harvesting and curing hay? Dairy nutrition specialists say enough protein is now lost in handling hay to feed 7,500,000 dairy cows for six months. That indicates rather emphatically that methods now used in harvesting this valuable crop are awkward, inefficient, and antiquated. The development of new haying machines and procedures is largely an engineering problem.

2. What crop conditioning requirements and facilities does the producer need so he can hold and market his commodities in top quality condition at his own convenience rather than to sell them on a flooded market at harvest time? This question opens up a whole field of engineering research that is relatively unexplored.

3. How valuable is the labor that is performed about the farm buildings in caring for livestock and crops? In dairying, for example, and in producing poultry and eggs, up to 80 percent of the labor time is spent in the buildings. The time required to care for one cow ranges from 100 to 165 hours a year with an average of 140 hours, while a flock of 124 laying hens and pullets will require approximately 200 hours. Compared with crop production these requirements are extremely high. What is required in new machinery or equipment and arrangement of buildings and work procedures to reduce the labor needed?

4. Can tobacco, cotton, peanuts, sweet potatoes, and in fact all vegetable crops, be mechanized for quantity production and quality control? On many of these products the surface of the research that needs to be done has barely been scratched.

5. How much does the producer pay for inefficiency in farm processing plants and small industries handling farm products, and what can engineering do to reduce costs? Output per worker varies as much as 25 percent in creameries within boundaries of a county, 800 percent in milk marketing, and 65 percent in poultry processing plants.

6. What types of refrigeration equipment for farm use will be required in the future? Insofar as farm applications are concerned, refrigeration is just in its infancy. The possibilities of freezing fresh milk on the farm are, for example, just becoming known. In the not-too-distant future, also poultry may be fresh-dressed, frozen, and sold directly from farms. With further research in farm refrigeration, the marketing of many perishable farm products might easily be revolutionized. Equipment to handle such demands has not yet been designed.

7. Can the potentiometer be used to supplant the seed germination test as a means for determining seed viability and growth characteristics? Some experiments have shown rather startling results and indicate this instrument may have untold value to the plant breeder.

8. Does anyone know or can any of us even imagine the potentials from use of a bactericidal, erythral, and infrared energy in agriculture? In this field of electric radiation preliminary explorations have already indicated a tremendous field for research of especial immediate interest on the possibilities of supersonic energy and its effects on plant, bacterial, insect, and animal life.

Agricultural Engineering Research Locations

You may be interested now in what agricultural engineers in the Department of Agriculture are doing and where.

The Farm Machinery Division is organized according to the following pattern: The commodity group, which we call "vertical," makes studies leading to the development of specialized crop production and harvesting machinery for peanuts, tung nuts, sweet potatoes, sugarcane, sugar beets, and cotton.

The horizontal phase is according to operations—pest and plant disease control machinery, fertilizer placement, tillage machinery investigations, and weed control machinery. These obviously cut across all crops.

The Fertilizer Placement Laboratory located at the Agricultural Research Center, Beltsville, Maryland, currently has application studies under way in 12 States. Incidentally this project has developed to date enlightening results on 37 crops in 25 States. The following are some of the outstanding yield results of field experiments on cannery crops:

Pea production ranged from 935 pounds per acre to 2,877 pounds.

Cannery carrot yields varied with different fertilizer placement practices from 34.14 tons per acre in Washington with common practice to 41.39 tons per acre with the best band placement (5 inches below the seed).

Bush beans at the same station ranged from 1.54 ton per acre to 5.50

tons per acre with the best placement (1 inch to side and 3 inches below.)

Cabbage in New York varied from 12.73 tons per acre with fertilizer drilled in to 14.13 with fertilizer placed on the plow sole.

Spinach yields ranged from 2,670 pounds per acre with fertilizer with the seed to 8,126 pounds per acre with best band placement (4 inches below seed).

Tomatoes yielded 9.126 tons per acre with no fertilizer, while with $\frac{1}{2}$ plow sole and $\frac{1}{2}$ in two bands, 2 $\frac{1}{2}$ inches on each side, and 4 inches deep the yield was 14.85 tons per acre.

Fertilizer Placement

An example of fertilizer placement research and results is shown in the following table on "Dill" cucumbers, Puyallup, Washington. Fertilizer 10-20-20 at 400 pounds per acre.

Position of band in relation to soil and plant	Yield per acre	Increase over check
	Tons	Tons
1 inch under seed	5.59	-1.03
Check—no fertilizer	6.62	
Broadcast	10.18	3.56
2 inches under seed	11.57	4.95
5 inches under seed	11.58	4.96
3 inches to sides of, 3 inches below seed level	12.87	6.25
3 inches under seed	14.65	8.03
4 inches under seed	14.87	8.25
2 inches to side of, 3 inches below seed level	16.33	9.71
1 inch to side of, 4 inches below seed level	16.78	10.16
1 inch to side of, 3 inches below seed level	17.71	11.09
2 inches to side of, 2 inches below seed level	17.77	11.15
1 inch to side of, 2 inches below seed level	19.37	12.75
1 inch to side of, 1 inch below seed level	19.71	13.09
Difference required for significance (5 percent level)		2.31

The Insect Pest and Plant Disease Control Laboratory at Toledo, Ohio, has application studies on corn borer, corn ear worm, cotton boll weevil, grasshoppers, russock moth, gypsy moth, spruce bud worm, and other pests as well as plant diseases. Some of this latter work has included studies on young tomato plants in Georgia. Just recently under the Research and Marketing Act of 1946, the agricultural engineers in cooperation with the entomologists have organized a new project for the Pacific Northwest on control of the pea aphid.

The U. S. Tillage Laboratory, Auburn, Alabama, is the center for basic studies on the relation of tools and equipment to nine typical soils. This laboratory is the only one of its kind in the world. We are now beginning a national weed control project with the plant scientists of the Bureau. The commodity mechanization work is located as follows: Sugar beets at Fort Collins, Colorado and East Lansing, Michigan; sugarcane at Houma,

Louisiana; peanuts at Auburn, Alabama and Tifton, Georgia; sweet potatoes at Clemson, South Carolina; Irish potatoes at Orono, Maine; and cotton at Auburn, Alabama; and cotton at Stoneville, Mississippi; Stillwater, Oklahoma; Lubbock, Texas; Fresno, California; Auburn, Alabama; and Edisto Station, South Carolina.

The Division of Farm Buildings is conducting cooperative research under animal shelters on dairy cattle at Columbia, Missouri; Madison, Wisconsin and Logan, Utah; poultry at the Research Center, Beltsville, Maryland; and swine at Davis, California. Grain storages: Corn at Ames, Iowa; soybeans at Urbana, Illinois; and southern grains at Athens, Georgia. Apple storage investigations at Wenatchee, Washington and Blacksburg, Virginia. Potatoes at Fort Collins, Colorado. Housing studies at the Agricultural Research Center, Beltsville, Maryland.

Mechanical Processing activities on cotton are centered at the U. S. Cotton Ginning Laboratory, Stoneville, Mississippi; on flax fiber at Corvallis, Oregon; on sansevieria and ramie at Boynton and Belle Glade, Florida; and on packing plant and locker plant phases of Rural Farm Industries at Athens, Georgia.

Farm Electrification investigations include the conditioning of forages at Blacksburg, Virginia and the Agricultural Research Center; curing of bright-leaf tobacco at Oxford, North Carolina and Tifton, Georgia; dairy equipment at Storrs, Connecticut, electric attractants and traps for insect pests at La Fayette, Indiana; radiant heat for beehives at Madison, Wisconsin; uses of high-frequency radiation in agriculture and various lights, including bactericidal, for poultry and livestock at the Agricultural Research Center.

Accomplishments

Earlier I indicated that our work was cooperative with the State experiment stations. To list all the projects and accomplishments would be a lengthy procedure. So I will list only some of the recent developments to which Federal agricultural engineers have made important contributions:

Sugar beets: Planters for planting decorticated seed to a stand; several blockers, including flame and chemical; the "finder" and beet lifter now common on manufactured units; and beet elevators and loaders.

Sweet potatoes: New bed cultivators, disk-type transplanter vine removers, sweet potato digger.

Insect control: Bait mixers and distributors, uniform dust hoppers, abrasion testers, uniform nozzle distribution mechanism, and airplane dusters and sprayers.

Sugarcane: Residue choppers, work on cane planter and cutter-stripper.

Peanuts: Planters, harvesters, driers.

Tung nuts: Nut gatherers, nut hullers.

Cotton: Precision planters, rotary hoe, flame and chemical cultivator developments, cotton stripper and picker developments, cotton gin and storage improvements.

Apple and pears: Improvements in refrigerated storage facilities, warehouse and refrigerated (and heated) railway cars, motor trucks.

Electric Energy for Agriculture

I want to touch briefly on some of the possibilities of applying electric energy to agriculture either as heat, light, radiation, or power. We are inaugurating some exploratory projects with high-frequency vibration of ultrasonics. It has been reported that the viability of seeds can be strengthened by such treatment. Reports from Russia on research prior to the war indicated material increases in vegetable yields from such treatments. One of our projects is in cooperation with the Indiana Experiment Station to see if insects can be controlled electrically. Our over-all attack on the corn borer is to (1) destroy the winter carry-over by shredding stalks and clean plowing, (2) to use electric attractant and traps to kill the moth before she lays her eggs, and (3) to kill the worms with pesticides. Once we determine what light attracts various insects we hope to expand this phase of the work.

Increasing the use of chemical pesticides is taking its toll of pollinating bees. Beekeeping appears to be an expanding industry. Success in this type of undertaking in northern areas requires heating and protection of the hives against winter temperatures. We are cooperating with Entomology in exploring possibilities of radiant heating of the hives by electricity. Other projects are aimed toward development of farm-size milk pasteurizers, poultry house ventilation and humidity control, electric chore apparatus, tobacco curing facilities, and possibly frost control for orchards, vineyards, and fields.

Despite the length of this paper I have covered only briefly the engineering problems of agriculture. In the solution of these problems those of us in public service research need the active cooperation of groups such as yours to enable us to do a better job for taxpayers who pay our salaries. An arrangement the Farm Equipment Industry uses to keep in touch with our work might also be applicable by the National Cannery Association. The Farm Equipment Institute has an advisory committee on research that has met with us a number of times to become informed on the research facilities and projects of our Bureau. This

committee has developed a list of research projects for consideration by State and Federal agencies. It is also sponsoring research-industry conferences in representative States all across the country once or twice each year. The committee that started out as a loosely organized group from different organizations in the industry is now officially the Agricultural Re-

search Committee of the Farm Equipment Institute. As such they select problems common to the industry as a whole or segments of the industry and request that we attack those problems. Some we do, others we in turn suggest to State experiment stations that have facilities to do the special jobs. To date some 20 projects have been suggested by the committee.

Fishery Products Conference

Fish Canning Problems Are Studied—Addresses and Fish Cutting Highlight Annual Convention Activities

The N.C.A. Fishery Products Conference at the Convention took place the afternoon of Monday, January 19. A showing of the Fish and Wildlife Service film on "Catching and Filleting of Fish" preceded the formal program.

Julian McPhillips, temporarily serving as Chairman of the N.C.A. Fishery Products Committee, pending the appointment of the new Committee by the President-elect, presided.

Congressman Thor C. Tollefson, from Washington, Chairman of the Subcommittee on Salt Water Fish and Shellfish Problems of the House Merchant Marine and Fisheries Committee was the principal speaker. Mr. Tollefson's thought-provoking speech pointed out the inequities between the treatment accorded agriculture and that accorded fisheries by the Government. He raised the question whether the industry had not been too indifferent to this in the past.

The other speakers were Michel Vucassovich, Gorton-Pew Fisheries Co., Ltd., who discussed fish canning on the New England Coast, and Dr. John

L. Kask, formerly in the fisheries section of SCAP, Tokyo, Japan, who discussed world fishery exploitation by Japan and some of the methods of fishing employed by the Japanese in their high seas tuna fishery. The afternoon session concluded with the showing of a film on the catching and canning of tuna.

The papers presented at the Convention by Congressman Tollefson, Mr. Vucassovich, and Dr. Kask, are presented in full below.

Other phases of the Convention's fisheries activities were the showing of fishery motion pictures, including two additional tuna films, one on Dungeness crab and two on salmon; the cutting of new and specialty canned fish products which contained about 40 samples including four samples of Japanese and Russian crabmeat and samples of tuna packed on the East Coast of the United States, in Costa Rica and in Argentina.

The Fishery Products Committee, following the policy it established at its meeting last May, met on Saturday, January 17.

FISH CANNING ON THE NEW ENGLAND COAST

By Michel P. Vucassovich, Chief Technologist, Gorton-Pew Fisheries Co., Ltd.

It was more than 31 years ago—during the first World War—that I had the pleasure of joining the people I now represent—the Gorton-Pew Fisheries. During these three decades, great strides have been made in processing of foods, and I should like to take you behind the scenes to tell you something of our experiences in developing and originating different kinds of sea foods.

When I joined Gorton-Pew, the company was exclusive producer and distributor of Codfish—"No Bones," sold throughout the country in individual cartons of 1/4 to 5-pound wooden boxes. We also were producers of salt mackerel and herring in barrels, tubs and pails, and were smokers and packers of bloaters, smoked halibut and some hard-smoked salmon. As a side line, we ran the only canning factory in Gloucester, where we canned such items as fresh herring in 1-pound tall cans, clams and clam chowder in No. 1 picnic cans and some flaked haddock

and flaked fish in 7-ounce cans. Finnan Haddie in 10-ounce glass jars also was packed.

At that time also we operated a sardine plant in Stockton Springs. The cans were made by hand and were packed in wooden cases with sawdust to absorb the oil oozing out of imperfect cans. We had to sell the product for \$3.50 to \$4 per case, and to keep our overhead down we packed No. 10 cans of apples in the fall. I will let you guess how much money we made at those prices! Our friends from Maine are now getting \$10 and \$11 per case for sardines, and they are afraid this honeymoon will last only another two years. I would suggest they go after foreign business. We haven't even scratched the market in South America for good sardines. Latin Americans are great consumers of real quality sardines such as are packed by Amieux and P.&C. In my travels to the west coast of South America, I have noticed that canned sardines from France, Portugal and Spain, and that a sardine packed in tomato sauce by one of our Western packers, are sold by the best grocery stores. King Oscar brand and some other Norwegian brands are sold under the name of "Sprats." In going after this foreign business, be careful not to sell Maine sardines under the label of sardines. Call them "Sprats of Herring in Oil." When I have competition from a foreign packer, I fight him by going after his own customers. And I think this is the time for you to go after this South American business and not wait for Norway to replenish the market.

Caviar from Groundfish

Before I came to Gloucester, I was in business for myself producing a caviar made of the roe of groundfish. I had patented the process and developed a nice bulk business with foreign trade. The raw product was obtained from Gloucester, and my business had grown to such an extent that, rather than advance the price of raw material to the fishermen, it was advantageous for me to go into partnership with Gorton-Pew. They had the facilities for canning the product and avoiding any cut-throat prices. For a few years this department, which was conducted under my supervision, grew to a substantial size. When the United States recognized the Bolshevik Government, the Russians were able to ship this type of caviar, made under slave labor, at such low prices that it could be sold here under our cost of production. Therefore, we had to discontinue this item.

About the time that I came to Gloucester, our mid-Western Scandinavian customers, who were great users of Fiskeboller in Kraft (that is, "Fish Cakes in Broth, Norwegian Style"),

asked us if we would pack this product in Gloucester. Not being acquainted with the formula and method of preparing the product, we engaged a cook direct from Norway to show us how it should be made. It was then up to us to put it in cans commercially. This was done, and after satisfying our Scandinavian friends, it occurred to us to make a similar product, suitable to the palate of our New England customers and such people who had drifted away from New England and still had the taste for fish cakes. We went to work in our own Kitchen Laboratory and made a suitable mix. But in canning, this turned brown under sterilization. A chemical laboratory was set up, and we sought the reason. We found that the browning was caused by the starches of the potatoes turning into sugar and caramelizing under high processing temperatures. We then had to find a method of eliminating this condition, either by removing something from the potatoes or adding something to the product. It took over two and a half years of hard work to determine that a certain amount of citric acid prevented this condition. A great deal of thought was given to the size and style of can, and we decided to adopt the present can (307 x 208). This is the product so well known today as Gorton's Ready-to-Fry Cod Fish Cakes.

Consumer Tests

In October, 1919, the first consumer tests were made on Ready-to-Fry. Six different markets: Rochester, N. Y., Hartford, Conn., Atlanta, Ga., Scranton and Wilkes-Barre, Pa., and Decatur, Ill., were selected. It was promised that if we sold 1,000 cases by January 1, we would open more markets. We sold 25,000 cases! We then opened up new markets by groups. This was a quality product and with effective salesmanship and advertising, it went over immediately.

We were progressing nicely with Ready-to-Fry and had built a canning factory exclusively for this product. Then we suddenly noticed that the product was turning brown under processing, even with the addition of the citric acid. We immediately stopped production. One of our chemists, now deceased, discovered that the condition was caused by sugar formation in the potatoes if the potatoes were kept at a critical low temperature of 36° to 40° F. He also found that by keeping the potatoes at a temperature of about 70° F. the sugar seemed to dissipate itself after a short time. Therefore, whenever we received cars of potatoes during winter months, a few potatoes out of each car were tested and if found to contain sugar, the entire car was reconditioned.

We felt that these discoveries, having been made by our own labora-

tories, belonged to us and they were never disclosed to the public. During World War II, when our Maine potato dehydrators encountered the same condition, we noted with great interest that scientists at the University of Maine found the same condition and recommended the same procedure for reconditioning.

Packaging Salt Mackerel

For a long time we wanted to improve the packaging of salt mackerel. It was customary to seal this in wooden containers. The retailer would remove some fish from the container and place it on the counter with his display of fish. If the mackerel was not sold in a short time, it would invariably crystallize and turn rancid. This also happened to the package which reached the retailer unless the mackerel was kept covered by brine. At various times, we were asked to make improvements. First, we canned mackerel in No. 10 cans and packed it in heavy brine and salt. But unless the product was kept under proper refrigeration at all times, gases formed in the cans and flavor was impaired, giving the product what we call in trade a "ripe, cheesy taste," not unlike that of anchovies. The cans were an improvement over the wooden containers, but they were not foolproof. We worked for some time and found a way of canning salt mackerel in 1-pound oval cans, with salt enough to avoid any pre-soaking of the product before using. This is well known today as "Salt Mackerel Fillets," in 1-pound oval cans. We also pack salt codfish in cans, which requires no freshening over night.

At the same time we worked to improve the sale of kippered herring. It wasn't long before I fell on the secret of the right flavor of this product. Today we have a product that in quality, taste and appearance compares favorably with, if not superior to, the imported kippered herring.

Another product originated in our laboratory is haddock chowder. Until we packed this, the only chowder known to the public was clam chowder, New England and Manhattan style. It was obvious that we should sell such a product; we were producers of fish, and in packing clam chowder we had to purchase the clams.

While we are on the subject of clam chowder, I would like to mention that it took a clam-digger from Pine-Point, Maine (as I have often heard him address himself, but his closest friends call him "Uncle Fred"), to put a clam chowder over and make it known from Maine to California. This was done with a quality product, proper salesmanship and good advertising. You've done a good job, Uncle Fred, keep it up.

A few years ago my company went into the canning of tuna fish in cottonseed oil, and tonno in pure olive oil,

Italian Style. We even had a tuna fishing boat come from Tacoma, Washington, to show the Gloucester people the type of mesh used and the style of fishing required for tuna. Two of our local boats were fitted to fish for tuna. One of these was a Portuguese boat; the other, the "Santa Maria," run by an Italian skipper, Captain Mercurio. My company, in cooperation with a Gloucester firm making nets, had a net made for Captain Mercurio, and the first day out, leaving at three in the afternoon, he arrived back the next morning at seven with six hundred fish weighing an average of fifty pounds each. Both Gloucester-owned boats had very good results on tuna.

We remained tuna packers for three years and would still be in the business if we could get the fishermen to go after tuna. They would rather fish for mackerel, due to the prevailing high prices for this fish. The price we were then paying for tuna was the same price as California was paying for their tuna. There is plenty of tuna off the New England and Canadian coasts, and the fishermen need only the proper boats and gear to get them.

I would like to say a few words about the canning of fish during war times. Invariably, the canner as well as the government wants to pack more food products. In World War I, my company was urged by our Government to can dog fish, and allowed us to sell it under the name of gray fish. The results were very sad for us. When first canned the product sold quite readily, but after remaining in the can any length of time, it underwent a chemical reaction which made the product unfit for human consumption because of a strong taste of urea.

I will mention only two products canned in this last war. Neither was very successful. First, whiting. This fish is very delicate and lends itself beautifully to freezing. But in canning, it does not stand up under transportation and falls to pieces. Second, porgy. This fish is so oily that it is very suitable to treat, as it has been for many generations; namely, put it in a kettle and boil out all the oil for paints and other industrial uses. Use the solids for fertilizer.

If more complete work had been done in Washington with the last three items mentioned, a lot of time, energy, material and money would have been saved the canners.

We of Gorton-Pew are guided in our work by the use of three laboratories and a staff of food technologists, chemists, bacteriologists and biologists, all working in the development of canning of fish and saving vitamins and proteins of the by-products. I have mentioned in one of my previous talks before a group of food technologists that the packing houses use all but the grunt—we don't even have that left, as fish have no grunt!

THREE-QUARTERS OF THE WORLD

By Dr. John Laurence Kask, Food and Agriculture Organization

Four hundred years ago it took Magellan more than three years to travel around the world. Fifty years ago, when most of us here were being born, or getting ready to be born, our fastest steamers took two months to get over Magellan's route. Today the same route is covered by modern aircraft in just a few days. The great significance of this increase in the rate of speed of travel is that our world has become politically and administratively quite small. In spite of this fact, however, in some ways our fast-shrinking world is still quite large. Great sections of the earth's surface have been only sketchily explored and the conditions, the abundance, and the kinds of life of great areas of the earth remain almost entirely unknown.

Nearly three-quarters of our whole world is covered by oceans. Only one-quarter is land. This land quarter of the world is divided into a fluctuating number of countries approximating five or six dozen. Each country is characterized by having its own set of national laws and jealously guarded sovereignties. The oceanic three-quarters of the world by contrast has been traditionally "free," that is, there is no well-established set of laws that govern man's conduct thereon. The oceans are "free" only because they have been considered to have no economic value except as a medium on which to sail ships.

World's Valuable Fisheries

The world's valuable fisheries have traditionally been carried on only in that very narrow shallow water area which lies off continental areas. Only occasional catches were made on the high seas. Today still, only a small proportion of the total catch is taken from high seas areas and hence the ocean areas still have little economic value. Very little is known of fish stocks in the oceanic areas either near the surface or in greater depths. Very little has been done to find out. The only country that has really seriously tried to find out what fish occur in commercial quantities on the high seas was Japan. For many years before December 7, 1941, Japan led all the world in fish production and in the exploration and exploitation of new oceanic areas, in training men for fisheries work and in investigating fish and fish products. This was certainly true in the amount of effort Japan spent in developing her fisheries, if not always in the quality of the accomplishment.

When Charlie Carry, the director of the Fishery Products Division of the National Cannery Association, located me in Seattle by long distance tele-

phone on the afternoon of New Year's Eve, and asked me to give this talk, I asked him what he wanted me to talk about. He answered that the Convention members might like to hear about the prewar Japanese fisheries, their fishing methods and oceanographic explorations.

Japanese fishing vessels were found in every ocean of the world. They fished on both sides of the Pacific north of the Equator, off Australia, in the Indian Ocean, off the West Coast of South America, off Argentina in the South Atlantic, and in the Arctic and Antarctic. Most of the Japanese fishing vessels, however, were found in that quadrant of the Pacific Ocean that lies north of the Equator and East of the international date line. From this area alone, Japan produced from three and one-half to five million metric tons of fish, or more than half of all the fish caught in the Pacific, and between one-fifth and one-quarter of all the fish caught in the world.

To produce this staggering amount of fishery products required a great deal of effort. In 1941, it took 1,500,000 Japanese fishermen, using 283,000 unpowered vessels, and 72,000 power vessels to make the catch. Only the total catch, however, is impressive, not the average catch per man or per vessel. But it was not fishing effort alone that produced the catch. Before 1941, Japan led the world in the exploration and exploitation of new oceanic areas, and in experimenting with new types of fishing vessels and fishing gear. I would like to tell you a little about their explorations and experimentation with gear.

At about the turn of the present century, Japan's fisheries were almost entirely carried on in hand-propelled vessels and with hand gear. Soon after 1900, an Englishman came to Japan with a North Sea trawler. That was all that was needed. Soon the Japanese had built several trawlers just like the original and had expanded their fishing to all neighboring seas.

They soon had copied also the otter trawl, V.D. trawls, beam trawls, and Danish two-boat trawls, and were fishing in the Yellow Sea, the East and South China Seas, in Tonkin Bay, off Australia, in the Indian Ocean and, of course, in the Okhotsk and Bering Seas, and many of the West Coast members of the National Cannery Association saw trawlers off the Mexican Coast. Among others was the very modern 600-ton trawler with refrigerated storage compartments.

Trawl Fishing

Some 40 large otter trawlers operated out of Japan proper before the war, but there were several hundred of the two-boat trawlers. These last landed nearly three-quarters of the

trawl-caught fish. The Japanese, using very large crews, had really developed this method of fishing to a very fine degree.

Tuna fishing was carried on in Japan before we even knew that tuna was good to eat. The early fishing for tuna was done mostly with tuna gill nets. Later, fishing with live bait and hooks was developed. When tuna proved a great delicacy and was in demand on world markets, the Japanese Government subsidized the big fishing companies in the building of more and more tuna vessels, and they were sent farther and farther from home to make their catch.

Tuna around Mandated Islands

Tuna was found in commercial quantities in many areas of the Pacific around the Mandated Islands and as far south as the Equator. Substantial catches were reported by fishing captains from areas near the Equator. The fishermen that fished far from home, however, like our own tuna men, ran into live bait troubles. At first, the Japanese devised ingenious methods of catching coral fishes for live bait, but this was too burdensome and time-consuming. Some smart Japanese thought of using a long line, with hooks attached, laid near the surface of the ocean and held up by a series of buoys. This gear looks much like halibut long lines, only the gangings are much longer, from two to five meters in length, and usually alternate one long and one short. Units of this gear, from two hundred to four hundred meters in length, are placed in baskets. Many miles of this gear is set near the surface of the water.

The hooks are baited with frozen sardines, herring, strips of larger fish or squid. At times salt fish is used and even artificial lures augment fresh, frozen or salt fish. Most of the Japanese tuna fishing, which was carried on far from the Home Islands, was accomplished with this long line gear.

The Japanese were among the first also to develop the mother or factory ship. With these you are all familiar. These factory ships could process the fish caught by their broods of fishing vessels far out at sea. This development made the Japanese independent of shore bases. Of these factory ships she had several for canning crabs and salmon and, of course, their six 20,000-ton whaling factory ships were among the largest, the most efficient and most modern in the world. The factory ship has recently been used successfully in this country too, but not nearly as extensively as by Japan. Japan lost all her factory ships during the war, but she still has the know how to build them and to operate them successfully.

Japan's prewar leadership in fisheries was achieved and maintained in

other ways too. The Japanese went to great effort to prepare men for the fishing industry. To train expert fishermen, fishing captains, cannery foremen and plant managers, the Provinces of Japan supported 32 Provincial fishery schools in 24 Provinces. In these schools, everything was taught from how to row a boat and how to fish to meteorology and navigation.

To train teachers for the fisheries schools and executives and technicians for the fishing companies, two fisheries colleges were provided, and to train their top-flight fisheries scientists the Japanese Government supported fisheries departments in three of their National Imperial Universities.

The Japanese Provincial and Central Governments also supported and operated some 70 research and training vessels. Some of these vessels were excellently equipped, and a couple of the prewar vessels were the finest fishery research vessels afloat. The bigger boats had experimental canning and processing plants on board, and were almost self-supporting, as they sold their "experimental" catches on the public market.

Every Province of Japan with fishing interests operated one or more fishery research stations. Of these Provincial research stations there were 112 in Japan. Besides these, the Central or Federal Government operated a large Central Fisheries Research Station in Tokyo with five strategically situated branch stations throughout the country. This "Central" station investigated not only the chemistry, physics and biology of fish and fishing, but also experimented with electronic methods of locating fish schools, new types of fishing gear and sent out daily radio reports to fishermen giving weather reports and the location of the warm and cold water drifts so that fishermen might be guided in their search for fish.

Japan's Leadership

Japan's leadership in fish production and in the exploration of new grounds did not just happen. It was carefully planned and well executed. Most of Japan's developments in new fishing methods, however, were not startling or brilliant discoveries. They proved economically successful in Japan only because men and labor came cheap. The same methods cannot necessarily be profitably employed in America because the premium on men and labor is high. The Japanese were forced by economic necessity to develop ocean resources. They are still desperately dependent on the sea.

And now, at the end of the greatest war of all times, the world finds itself short of food, with a constantly increasing population and its limited arable land area becoming increasingly impoverished. All lands are beginning

to look to the ocean areas for additional food. Our government and our fishing industry, which is represented by you gentlemen here, are taking an active, though very recent part in exploring and harvesting this almost unknown and unregulated three-quarters of the world. No one knows just what wealth lies in these waters but there are indi-

cations that it is quite considerable. Of one thing I am dead sure, if you gentlemen of the American fishing industry want to find out what the ocean can yield, you can find out, and if you want to wisely and profitably harvest this yield for mankind you can and will do it, and you won't need to follow any lead—but will take the lead.

THE FUTURE OF FISHERIES

By Congressman Thor C. Tollefson,
Tacoma, Wash.

I have chosen to talk to you about the future of Fisheries, principally because you are or should be interested in that subject, but also because it allows the speaker much latitude. Being a freshman Congressman, I feel the need of latitude. And in that connection may I urge you to view my remarks in the light of the fact that my experience with fisheries is comparatively limited. However, during the brief period it has been my privilege to serve as Chairman of the House Subcommittee on Salt Water Fish and Shellfish problems, I have obtained some rather definite impressions which I should like to pass on to you. Some of them have to do with stimulating further government interest in fisheries. You are a part of the fisheries industry and what affects the whole industry affects you.

Old and Honorable Industry

Fisheries is one of the nation's oldest and most honorable industries. With a product having an annual value in excess of \$450,000,000, employing more than 200,000 fishermen and shoreworkers, none can deny its importance to our economy.

Fortunately, or unfortunately, depending upon the particular point of view at the moment, it has been a very independent industry, especially in attitude. The fisherman always has been a self-reliant individual and this self-reliance has easily given rise to a conviction that he could make his own way, solve his own problems and run his own business without help from others. Standing on one's own feet is an admirable trait—one which we all admire—one which has paid dividends in the past and will do so again in the future. Occasionally, however, "Pride cometh before the fall," and there are times when it is advisable to adopt courses of action which differ from those followed in the past. We live in a complex and changing world; methods and procedures which were approved a few years ago might be considered obsolete in the present. That is true not only of purely business practices, but of other activities as well.

Let us consider, for example, the case of the farmer—another independent character. Not so long ago he plowed his fields, sowed his seed, harvested his crops and sold them to the local grain buyer with scarcely any outside assistance save the mutual exchange of help among his neighbors at harvest time. Today he can purchase his farm with Federally loaned funds, plow his fields with equipment financed by Federal money, sow his fields with seeds obtained through Federal assistance, harvest a crop which has been protected by Federal crop insurance, and then sell his product at a price which has been supported by his Uncle Sam. A far cry from the days when your father and mine ran a farm.

All of this has come about because we and the Government have felt that it was in the national interest to help the farmer who was a producer of foodstuffs. We may have disagreed, of course, upon the extent to which Federal aid was granted, but few of us would take issue with the principles involved. Nationally, we have benefited. We are convinced of the farmer's great contribution to the national economy and the war effort, that farm production has increased, that there has been soil conservation, and that other advantages have obtained.

The farmer of today has not only changed and improved his methods of farming, but has also most certainly changed his attitude and activities in other respects, particularly towards outside aid. A word more about him later.

Fisherman, the Food Producer

Let's look at another food producer—the fisherman—I include you who are here today because in a large measure your welfare is tied up with that of the man who provides the product you can. The fisherman, like the farmer, also made a great contribution to the war effort. Many of his vessels were taken over by the Government at the outset of the war. He and his sons, who were experienced seamen, gave their services, knowledge and skills to the armed forces. He knew the waters, winds, currents and coastlines of our shores. His information was invaluable to our country.

His contribution to our food supply was tremendous. He continues to furnish hundreds of millions of fish protein foods for our people. He's a continuous and important source of food supply. And may I emphasize at this point that fisheries is more than just a commodity—it is in a true sense one of our great national resources—as much as our timber, mineral and agricultural resources. It should be so treated.

The fisherman's contribution to our national economy has been largely the result of his own independent efforts, or of the mutually combined efforts of his fellows. Very little assistance came from his Government—relatively and comparatively speaking. By way of illustration, the agricultural appropriations for 1948 were \$623,673,000. Total expenditures for agriculture, however, must include cancellation of treasure notes for losses of the Commodity Credit Corporation amounting to a yearly average of \$230,000,000. Including apportioned parity payments, our Government will expend in 1948 the sum of \$853,670,000 or \$98.88 per farmer. This does not include endowment or revolving funds. For commercial fisheries in 1948 there was appropriated \$2,064,000, or \$21.07 for each regular commercial fisherman. Where the average farmer produces annually 34,500 pounds of food, the fisherman produces 47,000 pounds. The Federal Government then expends annually a little more than \$5 per ton for agriculture products as against about 90 cents per ton for fish products.

Lest some of you gain impressions to the contrary, may I say here that I am not at this time trying to make out a case in favor of subsidizing the fish industry. What I am attempting to do is to point out the need of working for proper recognition of the importance and value of fisheries to our national economy and, more particularly, by our Government itself. This you have so far failed to do.

What Happened during the War?

Let us consider what happened during the war. As I mentioned a moment ago, one of the first things that occurred was the taking by the Government of a large number of our fishing vessels which were needed for defense purposes. This conversion to national defense needs is not to be criticized and I mention it only as one incident in a chain of events. As part of the war effort, food requirements were increased. We were called upon, not only to meet domestic needs, but also to feed the men of our armed forces both at home and abroad; and in addition were asked to help feed our allies. The world requirements for fish protein foods were greater than our own domestic fisheries could

supply. So, through Lend-Lease and otherwise, our Government helped build and equip fishing fleets for foreign nations, notably Russia and Iceland, and later Japan and China.

Outfitted Russian Fishing Vessels

In our own shipyards we spent approximately \$23,000,000.00 in converting and repairing over 20 Russian fishing vessels. Included in that number were some 13 of the most modern and best equipped cannery and refrigerator ships which exist in the world today. The tonnage of these ships varies from 3,000 tons to 10,000 tons. We likewise fitted out and equipped vessels for other countries. Their equipment includes the finest modern machinery. In addition to supplying the vessels and outfitting them, we also gave these foreign countries our "know-how" and taught them our methods. These are the nations with which we must now compete, not only in the world market, but even in our own domestic market.

Fisheries products from Canada, Newfoundland, Iceland and Japan, to whom we furnished fishing equipment finer in many instances than our own, are now finding their way to our stores. Would you say this was fair competition, or would it be similar to engaging in a baseball game where you gave the opposing team your best pitcher and catcher?

But that is only part of the story. It becomes increasingly apparent that we must not only compete for markets, but for future sources of supply as well. The tuna fisheries are one illustration. Our tuna industry is located mainly in California, but 90 percent of the catch comes from south of our borders. Tuna are exclusively fishes of the high seas—far beyond the three-mile limit. Our people are vitally interested in other than present sources. There is every evidence that there are vast quantities of tuna in the central Pacific. It is known that the Japanese caught huge quantities of tuna in the area of the Mandated Islands prior to the war. There is little question that they will be back as soon as possible. It is a recognized fact that they had at least five ocean-going research vessels in these islands working on the problem of expanding the tuna fishery alone. Prior to 1941 the Japanese production of tuna in the Mandated Islands alone was equal to our tuna production—which was the second most valuable fishery in our nation.

Russia has previously announced an ambitious 5-year plan for the expansion of their fisheries in the Pacific. The Russians expect to increase their catch of fish in that area 2½ times by 1950. It is rumored that in addition to the vessels which we supplied them under Lend-Lease, they are building tuna clippers. They are within easy reach of the Mandated Islands.

The question arises—"Who is going to exploit the resources of these islands, and of the central Pacific?" Will it be the Japanese, the Russians, or the Chinese to whom we have also recently furnished a considerable number of vessels? Will our own industry reap a fair share of the harvest? The Japanese and Russians have a distinct advantage over our fishermen in that their governments recognize the expansion of high seas fisheries to be of vital importance to their welfare. Their governments actively encourage and aid this expansion and development. Before the war the Japanese Government had as many as 50 ocean-going research vessels. They will have them again. We do not know how many the Russian Government has outside of those we supplied, but we may assume that in connection with their 5-year plan they will be well supplied. I do not know who will reap the harvest of the Pacific—I have only posed the question.

There are other questions as well. Our fisheries, which produce 4½ billion pounds of fish annually, not only constitute a very important matter of economics, but have certain international aspects which involve matters of law and diplomacy. When our fishing fleet crosses paths with those of other nations many international questions are bound to arise. The pending Japanese Treaty raises some of grave concern. What will the United States Government agree to with respect to the extent and scope of Japanese fisheries? Will we be excluded from some of the rich fisheries resources? Will we be threatened as we were on one previous occasion with invasions of our salmon fishery? What will the treaty provisions be with regard to production and distribution?

Concern about World Markets

American industry is concerned about importation of cheap fishery products—and about world markets. It is concerned about whether the President's Proclamation of September, 1945, with reference to fishery zones along our coasts for the protection of American fisheries, will be observed in treaty agreements with any foreign power. They are concerned with the whole subject matter of so-called trade barriers. What position will our Nation take in connection with possible action taken by the Food and Agriculture Organization of the United Nations which has announced a tentative plan to divide up the world into certain fishery zones?

They are gravely disturbed because in none of these matters has our State Department consulted our own fisheries industry. They are aware that in the State Department, where some 8,000 persons are employed, only a handful of relatively submerged peoples have anything to do with fisheries. On the other hand, Canada has a Min-

ister of Fisheries, so does Norway. England has a Minister of Agriculture and Fisheries. Other Nations have placed the international aspects of fisheries in a high diplomatic level.

Quite apparently somebody has failed to do a job which must needs be done in order that our American fisheries can, in a growing, competitive world, survive, develop and expand. Perhaps a lesson can be learned from the farmer. He, through united effort with his fellows, has done an excellent sales job. Have you ever heard of the Agriculture Bloc in Congress? It is quite an influential factor. I can assure you from first-hand experience. When appropriations bills or other legislation affecting Agriculture come on the floor of Congress, that influence makes itself felt. What happens when similar bills affecting fisheries appear? Only a handful of voices are heard. I have personally observed Congressmen from districts embracing large fisheries activities exhibit little or no interest in fisheries legislation, and in some instances actually vote against it. Not because they were really opposed

to it, but simply because they were not informed—somebody didn't do a job—your job.

May I repeat again at this point—I am not making out a case for a fish subsidy program. I do say, however, that our American fisheries, because of their tremendous value to our domestic economy and because of their international aspects, deserve better treatment than they have heretofore been accorded. Our fisheries deserve the same fair consideration accorded to other American industries. They are entitled to Federal aid and encouragement in developing and exploiting new fisheries resources (and I use the term in the fisheries sense). They are entitled to assistance in research, marketing, transportation, distribution programs and in other ways as much as in agriculture. American fisheries will receive that assistance only if through your united efforts you endeavor to secure them. In my capacity I am happy to aid you in your endeavors.

dom, Pa.; second vice president—George Borg, Northland Canning Co., Cokato, Minn.; secretary—C. Luther Swaim, C. W. Swaim Canning Co., Wilmington, Ohio; executive secretary-treasurer—Harvey R. Burr, Chicago, Ill.

Forthcoming Meetings

February 2-14—Oregon State College, 27th Annual Cannery and Frozen Food Packers' School, Food Technology Department, Corvallis, Ore.

February 11-13—Ozark Cannery Association, 40th Annual Convention, Colonial Hotel, Springfield, Mo.

February 12-13—Michigan State College, Annual Cannery and Fieldmen's Conference, State College, Mich.

February 16-17—Tennessee-Kentucky Cannery Association, Annual Meeting, Andrew Jackson Hotel, Nashville, Tenn.

February 20-21—Utah Cannery Association, 36th Annual Convention, Hotel Utah, Salt Lake City, Utah.

February 26-27—Cannery League of California, 1948 Annual Meeting, Fairmont Hotel, San Francisco, Calif.

March 15-18—National Association of Frozen Food Packers, Annual Convention, Stevens Hotel, Chicago, Ill.

Officers Elected by Other Associations

Officers of canning machinery, food broker, grocery organization, Corn Cannery Service Bureau and other canner organizations, elected at their respective annual meetings last week in Atlantic City, are as follows:

National Food Brokers Association

President—Watson Rogers, Washington, D. C.; national chairman—Jack L. Gentry, Peterson & Vaughn, Inc., Spartanburg, S. C.; first vice chairman—Ralph D. Davies, Ralph D. Davies, Inc., Cincinnati, Ohio; 2nd vice chairman—Ed. W. Jones, Meinrath Brokerage Co., Kansas City, Mo.; third vice chairman—Harry E. Cook, Harry B. Cook Co., Baltimore, Md.; member-at-large on the executive committee—Roy C. Ossman, Paul E. Kroehle Co., Cleveland, Ohio.

National American Wholesale Grocers Association

President—Arthur W. Lutz, Smart & Final Co., Ltd., Los Angeles, Calif.; executive vice president-secretary—M. L. Toulme, New York, N. Y.; treasurer—J. Stanley Seeman, Seeman Bros., Inc., New York, N. Y.; chairman of board—Francis L. Whitmarsh, Francis H. Leggett & Co., New York, N. Y.; assistant secretary—Edward F. Phelps, Jr., New York, N. Y.

Young Guard Society

President—Paul V. Smith, Continental Can Company, Syracuse, N. Y.; first vice president—William A. Cole, Independent Lithograph Company, San Francisco, Calif.; second vice president—Ennis

Parker, Pomona Products Co., Griffin, Ga.; secretary—Robert I. Eirich, Crocker Union Lithograph Co., Baltimore, Md.; treasurer—Robert W. Mairs, H. J. McGrath Company, Baltimore, Md.

Old Guard Society

President—Arthur I. Judge, Editor of *The Canning Trade*; first vice president—William C. Schorer, Sauk City Canning Company, Sauk City, Wis.; second vice president—Harry McCartney, Stokely-Van Camp, Inc., Tampa, Fla.; secretary-treasurer—S. G. Gorsline, Battle Creek, Mich.

Association of Cannery State and Regional Secretaries

President—C. C. Rathbun, executive secretary, Florida Cannery Association, Tampa, Fla.; vice president—W. D. Jones, Illinois Cannery Association, Streator, Ill.; secretary-treasurer—William H. Sherman, Association of New York State Cannery, Inc., Rochester, N. Y.

Canning Machinery and Supplies Association

President—T. C. Whetzel, Asst. Sales Mgr., Tin Plate Division, Carnegie-Illinois Steel Corp., Pittsburgh, Pa.; vice president—Eugene A. Hildreth, Owen-Illinois Glass Co., Toledo, Ohio; secretary-treasurer—S. G. Gorsline, Battle Creek, Mich. (reelected for his 19th consecutive term).

Corn Cannery Service Bureau

President—John P. Kraemer, Mammoth Spring Canning Co., Sussex, Wis.; first vice president—T. Stran Summers, Charles G. Summers, Jr., Inc., New Free-

Ladies Headquarters

For the entertainment of ladies attending the Convention, the Atlantic City Convention Bureau sponsored a special "Ladies Hospitality Headquarters" in the Music Room of the Marlborough-Blenheim Hotel, Sunday through Wednesday afternoons.

The four-day series of entertainments began on Sunday with a concert by the Orpheus Singers. Musical programs followed daily with a different orchestra each day and other entertainment was furnished in the form of palmistry, astrology, hand-writing analyses. Refreshments were served daily and facilities made available for bridge and other card games.

Mrs. Jack Bacharach and Mrs. Clara D. Adams of the Convention Bureau were official hostesses, aided by the following ladies on different days: Sunday—Mrs. Carroll E. Lindsey and Mrs. Happer Payne; Monday—Mrs. Emil Rutz and Mrs. Carlos Campbell; Tuesday—Mrs. Chester Ray and Miss Helen Tate; Wednesday—Mrs. W. E. Free and Mrs. Nelson H. Budd.

Convention Resolutions

41ST ANNUAL CONVENTION ADOPTS RESOLUTIONS ON TIN PLATE, FARM LABOR AND OTHER PROBLEMS

At the closing general session of its 1948 Annual Convention, the National Canners Association went on record as being opposed to any further governmental restrictions upon the kind of tin plate and types of containers which may be used for the 1948 pack of canned foods. N.C.A. members, by unanimous vote, adopted a resolution warning the government agencies that a limitation in consumer can sizes will mean either a substantial loss of crops, or, in many instances, the purchase of canned foods in uneconomical containers at additional costs to the consumer.

In the interest of the farmer and the consumer, the Government was urged by the N.C.A. Convention not to further restrict the use of tin plate for food containers.

The N.C.A. Convention also adopted a resolution requesting the Government to increase its farm labor program to insure sufficient foreign workers for the harvesting of food crops during the 1948 season. The Convention resolution was in line with the statement at the Convention by N.C.A. Manpower Committee Chairman John F. McGovern, who forecast a reduction in canned foods and a curtailment in the over-all food supply if additional farm laborers are not provided this year.

Pointing out that it was to the consumer's interest to continue the National Canners Association's descriptive labeling program, the canner delegates went on record urging all canners and distributors to provide adequate information on their can labels.

The Convention delegates placed their approval on and again requested the Government to use canned foods in implementing the European recovery plan.

The National Canners Association, reiterating one of its previous Convention resolutions, again went on record as being unalterably opposed to all State statutes or regulations which would impede the interstate shipment and sale of canned foods, and particularly to measures levying special taxes on food products or requiring additional labeling requirements to those now prescribed by the Federal Food, Drug and Cosmetic Act.

Other resolutions passed at the 41st N.C.A. Annual Convention included recommendations for negotiated buying by the Government and special appreciation for the press and radio in their coverage of Convention and food news.

Full text of the resolutions follow:

Tin Plate

At the present time increased production is being asked of the food industry, and concern is expressed about the level of food prices. The canning industry is proud of its record of sustained production and of the fact that the prices of canned foods are no higher, and in many instances lower, than those of a year ago. Yet canners cannot go forward in serving the nation if unnecessary, ill-advised, and disruptive restrictions are placed upon their use of tin plate containers.

At the present time proposals have been announced for restrictions upon the kind of tin plate and the types of containers which may be used for the 1948 pack. The necessity for such restrictions has not been convincingly demonstrated. World production of tin has increased and is increasing. The proposals made would result in an utterly insignificant saving of tin during 1948.

Historically, the principal use of tin plate has been for metal containers used in the packing of perishable and seasonal vegetables, fruits and sea food. With no end use restrictions on the employment of tin for other purposes it seems clearly ill-advised to single out the canning industry, particularly in the face of increased exports of tin plate with heavier coating of tin, without real restriction as to the use to which the receiving country may put it, and with these controlled exports requiring quantities of tin far in excess of those which might theoretically be saved by the proposed restrictions on American canners.

These hastily contrived proposals not only will curtail production, work inequities, and largely disrupt the processing of canned foods for 1948. They will also measurably injure both growers and consumers. Limitation of consumer can sizes will mean either a substantial loss of crops or that the housewife in many instances will be forced to purchase canned foods in uneconomical containers at additional cost, with the result that both valuable food and tin plate will be wasted.

The interests of our growers who produce canning crops and of the housewives for whom we process them combine therefore with our own to require vigorous objection to these proposals.

Descriptive Labeling

Growing recognition of the value of the Association's descriptive labeling program derives in large measure from appreciation of the need for affording to consumers specific and adequate information about canned foods. Be it therefore

RESOLVED, That the Association urges upon all canners and distributors the adoption of the descriptive labeling approved by the Board of Directors and the Distributors Advisory Committee.

Publicity for Canned Foods

Maintenance of high quality, record production in 1947, and the availability of adequate supplies at reasonable prices have enabled the canning industry to satisfy the sustained consumer demand for canned foods. The industry is proud of its record: gratified that the individual initiative and courage of thousands of canners have made it possible for the average worker's earnings to go considerably further in the purchase of canned fruits and vegetables than in prewar years; that it has continued as an important marketing means for thousands of farmers; and that its research and advancing techniques and efficiency has enabled it to continue to bring the harvests of the fields and the catch of the sea to the American public. Yet in the stress of the times these important contributions are often forgotten. Wherefore, be it

RESOLVED, That the Association urges upon every canner distributor, retailer, and all others interested in the food industry the desirability of continuing through the use of every available facility to make known to the American housewife these essential facts about canned foods.

Farm Labor

WHEREAS, it appears that domestic labor for the harvesting of canning crops will be inadequate in 1948, and,

WHEREAS, canners and growers must make plans for the acreage of canning crops well in advance of the growing season, be it

RESOLVED, That the National Canners Association urges the immediate adoption by the responsible government departments of a program to insure that sufficient foreign workers for the harvesting of food crops for the 1948 season will be imported at a reasonable cost to the employers of such labor.

Negotiated Buying by the Government

Government purchase of canned foods by direct negotiation with canners has proved to be more expeditious, less cumbersome, and more efficient than the system of Government buying through advertised bids. The public interest will be best served by continuation of the system of direct buying of canned foods by the Government, rather than by res-

toration of the prewar method of Government purchase of canned foods through advertised bids.

President Emil Rutz

Anciently, the hope was often voiced that for a better world philosophers might become kings and kings learn philosophy. Even today the happy combination of a dynamic man of affairs and a reflective thinker is exceedingly rare. In President Rutz the Association has had the benefit of decisive leadership, and the canning industry the guidance of a penetrating thinker and forward-looking business philosopher. For him the illusive details of the moment have never obscured the basic economic precepts upon which free enterprise is founded, and it was his constant conviction that upon these only can the canning industry endure. Fearless and forthright statement of these economic truths gathers force from his gift of elegant yet apt language and rich metaphor. But neither meeting the constant call for effective action nor seeking a profound understanding of the business facts and logic satisfied his concept of serving; no matter how small the task, Emil Rutz has always in gracious fashion brought to every member of the staff an enthusiastic interest and a wise counsel, and to every canner a genial friendship. In him the Association and the industry have had an inspiring leader.

Appreciation for Speakers, Allied Trades, and Press

The worth of the Annual Convention depends largely upon the contributions of the guest speakers, the cooperation of the allied industries, and the coverage of daily and trade press and radio networks; therefore, be it

RESOLVED, That the President and the Secretary of the Association are hereby directed to express to each of them the Association's sincere appreciation of their friendly cooperation and valuable contributions.

Export Relief Shipments

While recognizing the need for securing in food relief shipments abroad the maximum caloric value for each dollar spent, the canning industry nevertheless believes that in the implementation of any foreign food relief program canned foods should play an important part. They require no special facilities for shipment or storage, and they contribute sound food values and desirable variety. Recognition of canned foods in these programs will facilitate the restoration and expansion of the export markets which they formerly commanded.

Interstate Barriers

Free competition and the consumer interest in the widest availability of all food products alike require that canned foods packed in conformity with federal

law and regulations be permitted to be sold freely throughout the United States. Be it

RESOLVED, That the Association records its unalterable opposition to all state statutes or regulations which impede the interstate shipment and sale of canned foods, and particularly to measures levying special taxes on particular food products or requiring particularized labeling in addition to the requirements of the Federal Food, Drug and Cosmetic Act.

Necrology

Inexorably the passage of the year takes from us beloved friends and able counselors. During 1947 we have had to mourn the loss of many to whom the industry owes an immeasurable and everlasting debt of gratitude—

H. A. Shaver, A. L. Jacobsen, C. Webb Campbell, William O. Wheeler, William N. Colonna, John Edgar Freney, Harold W. Ridgway, Henry H. Jones, Frank M. Warren, Charles F. Burns, M. H. Mann, David L. Hirsch, Emil P. Umhofer, A. T. Williams, Harry A. Patterson, Major-General Henry Granville Sharpe, Garth E. Carrier, Frederick Merritt Clark, Robert Nelson, R. Graves Craddock, C. B. Spencer, Robert Allison Sindall, B. J. Fetting, I. Newton White, Wilson Rood, Maurice L. Brenner, Julius F. Brenzinger, Joseph Horick, David S. Wertenburg, Willard A. Godfrey, Frank B. Fairbanks, Harry M. Brown, Washington Bartlett Mel, William A. Mee, Henry Lee Everitt, Oliver P. Hopkins, M. L. Babcock, Harrison Sydney Robinson, John Reese Rawling, Arthur Bryan Clark, and Cecil B. Annett.

Publications for Convention

The Association, in the weeks and days immediately preceding the Convention prepared and produced five publications for distribution and use there. These were:

Program of the 41st Annual National Canners Association Convention—28-page pocket size publication giving details of Convention arrangements, listing the Association officers, the agenda of the meetings and conferences, the meetings of participating associations and a daily schedule of all convention events.

Telephone Directory—72 pages of Convention hotel room location and phone numbers of members of N.C.A., National Food Brokers Association, Canning Machinery & Supplies Association, many of the distributor organizations and other food packing groups, government representatives and press.

Background Material for 1948 Canners' Panel—8-page leaflet furnishing statistical information on disposable income, food expenditures, consumption of canned foods and retail food

prices, with accompanying charts, for distribution to the Panel audience.

Annual Report of the Secretary—46 pages, presenting the Secretary's review of the Association's program and activities for the year 1947.

Annual Report of the Research Laboratories—42 pages, reviewing the activities of the Association's Laboratories and research programs of the year 1947.

Copies of the Panel Leaflet and the Annual Reports of the Secretary and Laboratories are being mailed to each member of the Association.

All Shipments to Europe to Require Individual Licenses

Commercial shipments of all commodities to Europe will require individual validated licenses beginning March 1, according to the following announcement made during Convention Week by the Office of International Trade, U. S. Department of Commerce. The announcement read:

All European countries are included in a new country group which will include all of the countries of continental Europe, the British Isles, Iceland, Turkey, the U. S. S. R., all Asiatic possessions of the U. S. S. R. and Turkey, Portugal, including the Azores and Madeira, Tangier, Spain, and all Spain's colonial possessions, and the Mediterranean Islands.

The new procedure will require individual validated licenses for all shipments to these countries, but it does not affect those licensing regulations applicable to specified destinations within countries, such as the arrangements for shipments of gift packages.

(See *Individual Licenses*, page 78)

Convention Attendance

Attendance at the overall Convention, including the National Canners Association, the National Food Brokers Association, the Canning Machinery & Supplies Association, and the distributor organizations, along with the several other miscellaneous trade factors, was estimated at approximately 17,000. About 16,000 of this was figured by the Atlantic City Convention Bureau from registrations in the 40 hotels used by the above organizations and the balance is accounted for by the fact that people attended the Convention who had found accommodations elsewhere or who came in daily from nearby locations.

Meeting of N. C. A. Directors

Preliminary to the General Sessions of the 1948 Convention at Atlantic City, were a number of Committee meetings held on Friday and Saturday, January 16 and 17; the meeting of the Administrative Council on Saturday, January 17; and the all-day meeting of the N.C.A. Board of Directors at the Shelburne Hotel, Sunday, January 18.

Important at the Directors' meeting were the report by Chairman Oliver Willits of the N.C.A. Tin Committee and the action taken by the Board on the Association's Building program.

Report on Tin

Mr. Willits' report on the tin situation, besides portraying the impact on growers, canners and consumers of the government proposal to reinstate can size controls, reviewed the intensive activity of the N.C.A. Tin Committee in meeting this threatening situation. Since the proposal was first made by the Department of Commerce, the Association staff and members of the Tin Committee have held a series of meetings with government officials, with representatives of can manufacturers, and with others interested in the question.

The Association was told informally of the new Commerce proposal at a meeting with officials of the Department on January 2, and immediately requested the Government to withhold issuance of the order, at least long enough to permit the industry to confer, Mr. Willits reported.

A representative group of canners was called to Washington for a meeting January 12. In the meantime a conference was held with the Under Secretary of Commerce who officially affirmed the intention of the government to proceed with reinstatement of can size controls.

At the January 12 meeting it was agreed that the industry would be given until January 26 to submit suggestions and recommendations. President Rutz immediately expanded the membership of the Association's Tin Committee to study the proposal.

This Committee held several meetings, both in Washington and Atlantic City, has collected and supplied statistical materials and memoranda to those concerned, and is covering the situation closely, asserted Mr. Willits.

N.C.A. Building Program

Throughout the Board discussions of the Association's activities, atten-

tion was focussed as it had been at virtually all Board meetings in the past on the crying need for adequate housing facilities for the Washington laboratory and administrative staff. The expanding activities of the Association in meeting the needs of the industry have resulted in overtaxing the present Washington headquarters, and in the opinion of most, it has reached the point of possibly interfering with the efficient functioning of the various divisions. In particular, the Research Committee again noted that the physical conditions under which the Association laboratories are operating remain as unsatisfactory as they have been in the past.

In view of this critical situation, the Board extensively debated the report and recommendations of the Association's over-all Buildings Committee, and authorized it to proceed immediately with the recommended program. The financing plan, which is discussed in detail in the Committee's report, contemplates the application of \$300,000 of the Association's reserve funds to the building program, the invitation to allied industries to participate in contributing to the program, the immediate raising of a portion of the funds by an increase in the dues for 1947, and the long-term financing of the balance. The Board adopted the Committee's recommendations that there be added to the 1947 dues 3/20ths of a cent per case for seasonal products and 3/40ths of a cent per case for nonseasonal products with a provision that these amounts be considered noncurrent and used for building purposes alone, and that in the case of any canner who would find payment of this sum at the present time financially burdensome, the election be given to pay it in three equal annual installments over the next three years. Complete information as to the building program and the collection of the additional 1947 dues will be forwarded to each canner within the near future.

Actions by Board

The Board took the following action:

Approved a budget for the Association's operations in 1948 totaling \$869,923.00, as compared with the 1947 budget of \$907,220.00.

Adopted resolutions (1) providing that a building fund be set up on the books of the Association and that \$300,000 of the present reserve fund be transferred to this building fund;

(2) authorizing the Building Committee to continue its work and granting it authority to buy, sell, lease and exchange real estate in order to acquire building sites; and (3) fixing the annual dues for the calendar year 1947 at 9/20ths of a cent per case for seasonal products and 9/40ths of a cent per case for nonseasonal, this increase to be specifically nonrecurrent and to carry with it also the option of paying the additional assessment either in one sum or in three equal annual installments.

Approved motions (1) providing for a program to study development of maturity and quality in raw products through grants in aid; (2) for development of media to improve canner-grower relations; and (3) authorizing the Raw Products Bureau to act as a clearing house for information about and to accept funds raised by canners for the purpose of carrying out agricultural machinery improvement projects, with authority to disburse such funds.

Moved that it is the sense of the Board that the public relations program, as presented by the Committee, is a highly desirable one, but that because of budget difficulties it cannot be adopted at this time, and that the Committee be continued and requested to report at a later meeting.

Approved labeling recommendations for citrus products made by the Labeling Committee and directed the Labeling Division to continue to encourage use by canners and distributors of the Association's voluntary labeling recommendations.

Authorized the following Special N.C.A. Committees: Building, Conference, Convention, Food and Drug, Foreign Trade, Manpower, and Public Relations.

Approved and recommended for transmission to the Bureau of Standards to be promulgated as a revised Simplified Practice Recommendation, the list of can sizes reported by the Committee on Simplification of Containers.

Adopted the Administrative Council's recommendation for continuation through 1948 of the current rate of membership dues—3/10ths of a cent per case on seasonal products and 3/20ths of a cent on nonseasonal.

Other Program Items

Other phases of the program of the Directors' were the report of the Administrative Council on budget recommendations, presented by Marc C. Hutchinson, the action on which is reported above; explanation of budget detail by Secretary Carlos Campbell; a report of the Trust Indenture Fund delivered by Forrest F. Heaton of the staff; and the report of the Legislative Committee, made by Chairman John F. McGovern.

Committee Reports

The following N.C.A. Committees held meetings just preceding the Convention and came before the Board to make reports for discussion or action: Building, Scientific Research, Labeling, Convention, International Trade, Public Relations, Tin, and Simplification of Containers. Of these Committees, the reports of those that delivered and filed formal statements to the Board are reproduced below.

In some cases preliminary Committee meetings were held and formal reports written, but not delivered to the Board. This is true of the Raw Products Committee, whose report will be published in full in the INFORMATION LETTER at a later date. However, it did make proposals to the Directors

and action taken with regard to these is reported above. The Home Economics Committee report is another of these which will be presented later, but the Committee, during the Board discussions, proposed that the facilities of the Home Economics Division be used to determine consumer preferences as regards Food and Drug Administration Standards and that additional personnel and funds be authorized for this purpose. Because of budget limitations it was voted to defer action on this to the May meeting of the Board.

The Fishery Products, Baby Foods, Claims, Conference, and Statistics Committees, and the Research Advisory Council also, held meetings preliminary to the Convention sessions.

Reports of Committees

REPORT OF THE BUILDINGS COMMITTEE

By W. F. Dietrich, Chairman

This is a report of your over-all Buildings Committee, appointed as a result of action taken by the Board of Directors at the November, 1947, meeting held in Chicago. Our Committee was appointed as successor to two previous committees, but these earlier committees had somewhat limited scope, their function being primarily to select and acquire land for buildings, one in Washington and one in California. The appointment of the over-all committee resulted from a belated recognition that a building program, to be successful, must encompass a complete program including the study of the actual space requirements, a determination of completed costs of the projects including costs of land, buildings, and equipment, consideration of the financing problems involved, as well as the acquisition of the land. In this report we attempt to give you a somewhat rough outline of the complete picture.

Need for New Buildings

This report does not bother you with the detailed recitation of the need for new buildings. That matter has been discussed on numerous occasions in the past. Presumably the mere fact of the appointment of this Committee indicates awareness on the part of the Board of the need for a building program.

The vast majority of us agree that the canning industry is still in its

youth and the future warrants and requires headquarters and laboratories commensurate with the job to be done.

Our first practical step was to determine the approximate space needs for the various departments and functions, in order to determine the total square footage needed in the new buildings. Exhibit A is a brief summary of the situation, comparing presently occupied space with present needs plus a reasonable allowance for future needs.

EXHIBIT A	
	Sq. Feet
Washington	
Presently occupied area—	
owned.....	16,328
Presently occupied area—	
leased.....	1,608
	18,026
Needed	
Administration offices, meeting room,	
filing and storage.....	17,000
Laboratory functions.....	17,000
	34,000
Western Laboratory	
Presently occupied area—	
owned.....	8,553
Presently occupied area—	
leased.....	6,488
	15,041
Needed	18,000

The space needs were based on figures submitted by the staff and those space needs were not checked in detail by the Committee. The Committee felt that a comparison of the indicated needed space with presently occupied and admittedly inadequate space indi-

cated that the space needed figure was adequate to cover the reasonable needs of the functions presently and for a reasonable time in the future. The Committee felt that the first function of the architects, when hired, would be to recheck the needs and requirements, in the process of which study the architects would consult both the staff and the Research Committee in connection with laboratory needs, and in connection with the administration and general functions in Washington, with the staff and the officers of the Association.

Estimated Costs

Having arrived at an estimated square footage needed, we were in position to estimate total construction costs. We had several estimates from people engaged in construction in these areas, ranging from \$1.00 to \$1.50 per cubic foot, the latter figure including air conditioning. We had a rather definite estimate from one of the largest national construction firms of \$18.00 per square foot, air conditioned, and \$15.00 without air conditioning. Since these latter figures tallied pretty close to the upper levels of the estimates on a cubic foot basis, we have used these figures. We then arrived at the following figures of total estimated cost, these being shown in Exhibit B, which follows:

EXHIBIT B	
ESTIMATED COST OF NEW BUILDING PROJECTS	
Washington	
Estimated building cost, air conditioned, 34,000 sq. ft. @ \$18.00.....	\$612,000
Land cost, estimated.....	150,000
Estimated costs, grading of site, walk, driveway, landscaping....	25,000
Office furniture and equipment, laboratory fixtures and equipment.....	125,000
	\$912,000
West Coast	
Estimated building cost, 18,000 sq. ft. @ \$15.00.....	\$270,000
Site.....	25,000
Estimated cost, grading site, walks, driveways, landscaping.....	25,000
Furniture and equipment, laboratory fixtures and equipment....	100,000
	\$420,000
Total both projects, as estimated	\$1,332,000
Reserve for cost increases and contingencies.....	168,000
Total budget, two projects..	\$1,500,000

We admittedly do not have detailed estimates on cost of furniture, equipment, and laboratory fixtures, equipment, etc., but we believe the estimates we have used are adequate. We have allowed a moderate cushion for contingencies and cost increases. While possible savings might be made here and there, we believe the Association should not contemplate going ahead

with the projects at any time within the next few years unless it is prepared to spend and finance in total a sum of close to \$1,500,000.

Exhibit C reflects the judgment of a majority of our Committee of the best way to finance the million and a half dollars. After consulting with real estate agents, we believe the Association could expect to liquidate its present properties at the prevailing level of prices for a minimum of \$200,000. The Association has, at the present time, reserves invested in securities totalling \$678,000. In addition, it had on December 31, 1947, approximately \$150,000 in cash, making a total of something over \$800,000. While reasonable reserves are absolutely essential, it is the recommendation of our Committee that we take \$300,000 of reserves and earmark it as part of our building fund. Had we foreseen several years ago the extent building costs were to advance we might have built up larger reserves during that period. At the present time we face the following facts. The industry by and large is able to make a substantial contribution to a building fund. Because general business activity is at a high level, building costs are extremely high. If some time within the next year or two we encounter a business recession which would make it possible to get favorable bids from building contractors, the same recession would make the industry less able to put up money for a building fund at that time. Therefore we recommend that the Board take action now to raise a substantial sum, \$400,000, to put into the building fund. This is equivalent to one-half last year's annual dues. In our formal recommendation later in this report we suggest that any canner for whom the payment of the full amount on this additional dues would be a financial inconvenience, be given the privilege of paying his amount in three equal annual payments.

In the opinion of the Committee, it is felt desirable to approach the suppliers of the canning industry for some financial help on these building projects. Since more than half of the amount required is for scientific purposes which will benefit not only canners but the people who supply the canners, we feel it proper to include a sum for such contributions in the financing program. We recommend

that the remainder of the cost be financed over a long-term financing arrangement, presumably with an insurance company or similar institution. While it would be desirable to have current funds on hand to defer all of the cost, that does not appear to be in the cards and much can be said about the fairness of having the future beneficiaries of the program pay some part of the building cost.

Washington Building Sites

Along with its deliberations on the over-all program and its financing, your Committee has also given considerable attention to suitable building sites in Washington. You will remember that the Association last year acquired a suitable site in Berkeley, Calif., for the Western Laboratory.

The Committee has intensively considered three Washington sites. We are negotiating for a parcel of land in the general vicinity of the Association's present offices. This site would give us 13,160 square feet. It would cost approximately \$10 per square foot or a total of about \$135,000. It is expected that definite word will be available on this site within the coming week.

We also have an informal option on another piece of property located on a corner at 18th and N Streets, with an over-all area of slightly over 6,000 square feet and which can be purchased for approximately \$125,000. This piece would cost about \$17.50 per square foot.

You will remember that the Association now owns in its present buildings about 5,700 square feet, and in addition rents an adjoining building. From time to time consideration was given to buying the two lots next to the present Association holdings. These aggregate a frontage of 43 feet on 18th Street. By consolidating these two lots with our present holdings, a total of 11,700 square feet could be assembled. This would be a practical building site for an L-shape building, and it would also be possible to concentrate on the lower part of the L and sell off a portion at the corner. We are advised that the only method of acquiring these two adjoining lots would be to make the owners a definite firm offer and this the Committee has had no authority to do up to this time.

After full consideration, the majority of our Committee concluded that because of the zoning situation, the high cost per square foot, and the limitations of space, the 18th and N Street property would not be fully suitable for the Association's needs.

On the other two parcels under consideration, your Committee, if given the opportunity, plans to act promptly on the purchase of either the two lots adjoining the present Association headquarters, or the other site under consideration. In either case, it may turn out to be impossible to acquire such property.

While we believe that a suitable Washington site should be acquired promptly, and that further study and planning of the Association's needs should be continued, our Committee believes that a decision as to the time when building should be commenced should be delayed until satisfactory plans and fairly closely estimated building costs are available. We believe that considerably more detailed plans and cost studies can be available for the May meeting of this Board. We believe that a definite financing program should be approved and instituted at today's meeting.

Committee Recommendations

Our Committee, therefore, respectfully makes the following recommendations to the Board for action at this meeting:

First, that the Board of Directors direct that there be set up on the Association's books an account to be known as the "Building Fund" with specific direction that such fund is to be used only for the acquisition of land and the cost of construction and equipment of a Washington Headquarters and laboratory and of a western laboratory, and such other expenses which will be necessary in accomplishing these objectives.

Second, that the Board of Directors further direct that there be transferred on the Association's books from the General Fund to the Building Fund the amount of \$300,000.

Third, that at this meeting the Board of Directors levy a special building fund assessment, in the form of increasing the dues for 1947, so as to increase such dues by 50 percent. This will mean an addition to the 1947 dues of each member of 3/20ths of a cent per case for seasonal products and 3/40ths of a cent per case for nonseasonal products. We recommend further that in doing so the Board specify that this increase in 1947 dues be considered *nonrecurrent* and to be used for Association building purposes alone. This additional amount of 1947 dues will be payable in regular form, but in the case of any canner who would find payment now financially burdensome, the election should be given to pay this additional amount

EXHIBIT C

SUGGESTED FINANCING PROGRAM FOR NEW BUILDING PROJECTS

Total budget for two projects.....		\$1,500,000
Deduct		
Sale of presently owned property		
Washington, estimated.....	\$135,000	
San Francisco.....	65,000	200,000
Balance.....		1,300,000
From present reserve funds of Association.....		300,000
Balance to finance.....		\$1,000,000

of 1947 dues in three equal installments on February 15, 1948; February 15, 1949; and February 15, 1950. Canners taking advantage of this option would thus pay an additional one-twentieth of a cent per case for each of the next three years.

Fourth, that the Board of Directors, by appropriate resolution, give the Buildings Committee the same authority actually to acquire a Washington building site that was given the previous Building Committee at the November, 1946 Board Meeting.

REPORT OF PUBLIC RELATIONS COMMITTEE

By Howard T. Cumming for
B. C. Olney, Chairman

This Committee was created in Atlantic City just a year ago. The Committee was charged to make a study of the public relations program of the Association and to formulate a future program for your consideration. You were not too surprised when the Committee, confessing its lack of knowledge in this special field of public relations, returned with the request that it be authorized to retain competent outside counsel to survey what has been done, what can be done and what should be done. You very kindly authorized this and the services of the Opinion Research Corporation were engaged.

After some months the report of this research group was received and considered by your Committee. Subsequently this report was sent to the members of the Board and Administrative Council. Your Committee trusts that it was found informative and useful in sizing up the opportunities in an expanded activity in the field of public relations.

The Committee has adopted most of the recommendations made by the Opinion Research Corporation but in modified form. For instance, the Committee felt strongly that no consideration should be given to an Association advertising program. Also it was felt that we should not undertake to do too much too fast, and funds for the recommended program, if approved, will be much less than suggested by the report.

The Committee in presenting its recommendations to you feels that in support it cannot do better than to quote briefly from the report:

"The Meaning of Public Relations"

"It is necessary at the outset to discuss briefly the meaning of public relations.

"As we understand the term, public relations means behavior and interpretation of behavior in a manner which wins and holds public support.

"We have expressed the formula for good public relations as follows:

"'X' plus 'Y' equals good public relations.

"Where 'X' is right living—serving the public interest—doing the right thing by the various publics affected,

and 'Y' is interpretation of right living—dramatization, and explanation, information.

"Under this formula a company, association, or institution must conduct itself in such a manner as to win friends, but it must also maintain lines of communication from the public to help govern its conduct, and to the public to interpret or make people aware of that conduct.

"The inseparability of the two factors in public relations must be understood. Some organizations have clung to the belief that right conduct was enough—that interpretation was not necessary—yet the book of hard experience is filled with cases of true benefactors being castigated by the public as malefactors. Some organizations have operated on the theory that smart publicity would cover up bad conduct. All competent public relations men today reject this theory.

"Because public relations must be thought of in two dimensions, this study will proceed first to analyze the 'X' factor—or what the Association has done to win public good will; then examine the 'Y' factor—what the Association has done to interpret itself to its various publics.

"Our Findings Add Up to This

"1. The National Canners Association scores high on the "X" factor in the public relations equation; it has made great contributions to its member companies, the canning industry, and the consuming public.

"2. The National Canners Association scores much below its potential on the "Y" factor; it has not by any means made satisfactory use of modern public relations techniques to tell its story to its publics.

"3. The primary reason for this condition, we believe, traces back to the fact that the National Canners Association has no public relations specialist. As now organized, the Association has specialists in chemistry, bacteriology, consumer claims, labeling, home economics, agronomy, statistical research, and organizational affairs, but each person is required, in effect, to double as his own public relations expert.

"4. The National Canners Association, we believe, should reorganize its public relations machinery to capi-

talize adequately on the public relations opportunities inherent in the Association's position. This means—

"a. A permanent Public Relations Committee.

"b. The appointment of a highly competent full-time public relations man.

"c. Reformulation of its long-term public relations plans.

"The Need for Public Relations Specialization

"Since assuming the position of Secretary, Mr. Campbell has made several significant moves in the direction of improving the Association's public relations efforts. For example, the program of general press releases was inaugurated and the Public Relations Council organized.

"But the National Canners Association has not yet exploited to the full its public relations potential, largely, we believe, because of inadequate staff specialization in the public relations field. The Association maintains specialists in chemistry, bacteriology, consumer claims, labeling, home economics, agronomy, and statistical research, but the head of each division is, in effect, required to double as his own public relations expert.

"We believe the Association needs a public relations specialist whose sole business is to think about communicating ideas to the public, who can see drama and newsworthiness in events in the canning industry and activities of the Association, and who knows how to interpret these activities to the various publics in such manner as to reflect credit on the canning industry and stimulate the public to greater use of its products.

"Whenever business is faced with problems in a given field, it develops or retains experts who specialize in the handling of those problems. The technique of interpreting a company, a trade association, or an industry to the public is widely regarded by business as a specialized operation, and we see no reason why this conclusion should not be applicable to the National Canners Association.

"Member Thinking on Further Public Relations Efforts

"The thinking of the key members we have seen varies in its emphasis, but it points predominantly to the idea that the National Canners Association efforts in the field of public relations need to be re-examined and strengthened.

"What Needs To Be Done

"The National Canners Association, we believe, should reorganize its public relations machinery to capitalize adequately on the opportunities inherent in the Association's position. This means:

"A. The Association should have a permanent Public Relations Committee. We believe that this Com-

mittee should draw into its membership two types of competence—

"1. Public and industrial relations practitioners in the industry.

"2. Officials of member companies who do not specialize in public relations, but who are 'public relations minded.'"

"B. A highly competent full-time public relations man should be appointed.

"*Qualifications.*—This man should be drawn from the food industry, if possible. He should have practical public relations experience, including such operations as handling the press and radio, arranging for magazine, radio and movie features, writing, staging events for public relations purposes, and the formulation of business policy. He should be in the 30 to 40 age bracket—dry behind the ears, but not yet arrived at glittering professional eminence.

"Since canning is closely linked with agriculture, it would be advantageous if the Association's public relations man were conversant with farm problems. Because of the Association's emphasis on scientific work and sound scholarship, its public relations director should have a good feel for the scholarly and practical, scientific approach.

"*Place on the Organization Chart.*—Since public relations involves all the activities of the Association, the appointee, we believe, should be installed as Assistant to the Secretary, in Charge of Public Relations. This position on the organization chart is consistent with industry trends generally. More and more companies are channeling public relations activities to the president or to the chief executive officer.

"We would avoid creating a Division of Public Relations in the Association comparable to the Home Economics Division or the Raw Products Bureau; because, as will appear below, the Public Relations Director should collaborate closely with the heads of all divisions. Hence his organizational status should be linked to the office of the Secretary. His organizational status should be on the level of a division head, and he should be eligible to participate in all staff meetings where Association activities touch on public relations.

"*Indoctrination Period.*—The affairs of the National Canners Association are complex and ramify over many fields. Hence upon appointment the Director of Public Relations should be given ample time to familiarize himself with the operation in Washington.

"*Budget.*—There is a sound business reason for increasing the staff to enable the Association to do more effective work in the field of public relations. If the director of Public Relations turns in a good piece of work he will greatly broaden and strengthen the base of Association and canning industry public relations efforts. To purchase the sum total of free radio time, newspaper and magazine space, newsreel footage, etc., gained yearly for the canning industry by capitalizing on

such public relations opportunities would require many thousands of dollars."

The Committee recommends that the Association engage a competent public relations specialist and that a budget be approved to carry out this program for 1948. It is also recommended that the Board authorize the appointment of a standing public relations committee, the duties of which would be to review from time to time the progress of the public relations activities, and to counsel with and advise the Secretary.

REPORT OF THE LABELING COMMITTEE

Made by Happer Payne, Director,
Labeling Division

It was reported to the Committee (1) that after a number of years of preparation, interrupted by the war, there is now a substantial list of labeling recommendations, each of which is backed by an objective definition; (2) that there is a pronounced tendency for canners and distributors to apply the recommendations to their labels; (3) that the prospects of achieving measurable success in improving labels in the next year or two are bright, provided reasonable and practical educational efforts are applied.

The Committee was in agreement that the time has come to shift emphasis in the labeling program from the development of labeling recommendations to the stimulation of the use of the label recommendations by canners and distributors. In keeping with this policy two motions were passed:

1. That upon the completion of present scientific research projects, future scientific research be confined to special projects which may arise from future specific problems. Definite funds for any such special projects will be asked of the Board of Directors after approval by the Technical Advisory Committee and the Labeling Committee, and no such project will be undertaken without approval by the Board.

2. That by proper and practical means within the limits of the budget, the education of canners and distributors on the use of labeling recommendations be intensified and that efforts be made to expand the understanding of the recommended labeling by consumers. Opinion was expressed that the funds in the budget which the Committee proposes were inadequate for as extensive educational campaign as is desirable.

It was approved by motion that, after consultation with the fish and seafood interests, a fish and seafood subcommittee or subcommittees be ap-

pointed to study and recommend improved labeling of those products.

It was agreed that when and if standards of quality and identity are promulgated by the Food and Drug Administration for green and wax beans, asparagus, corn and sweet potatoes, appropriate committees for these products may profitably review labeling recommendations for them.

The following labeling recommendations for citrus products were formally approved and recommended to the Board for its approval. These recommendations were made by the committee on labeling of citrus after three meetings of the committee and two referendum votes of the citrus canners in Florida and Texas.

Sections

Name—that SECTIONS rather than SEGMENTS be used for that style of pack.

Statement of Sweetness for Sweetened Grapefruit Sections:

IN HEAVY SIRUP—for cut-out Brix 18° and over.

IN LIGHT SIRUP—for cut-out Brix 14° up to 18°.

IN SLIGHTLY SWEETENED WATER—for cut-out Brix under 14°.

Statement of Wholeness of Sections—Grapefruit, Orange, and Mixtures:

WHOLE OR MOSTLY WHOLE—to be applied to packs in which at least 75 percent of the sections by weight are whole or almost whole.

WHOLE AND SOME BROKEN—to be applied to packs in which at least 50 percent but not 75 percent or more of the sections by weight are whole or almost whole.

BROKEN—to be applied to packs in which less than 50 percent of the sections by weight are whole or almost whole.

For the purposes of applying the above definitions of labeling terms "Whole" and "Almost Whole" and "Broken" sections are defined as follows:

"Whole" sections are sections which have retained their apparent original conformation, that are not excessively trimmed, and that weigh not less than 1/4 ounce.

"Almost Whole" sections are portions of sections that are not less than 75 percent of the apparent original section size, that are not excessively trimmed, and that weigh not less than 1/4 ounce.

"Broken Sections" are portions of sections which are not "Whole" or "Almost Whole."

Sections, Variety.—Sections of pink variety grapefruit be labeled PINK and that variety of orange sections be declared if distinctive and important.

Sections, Quantity.—When quantity is stated in average servings, that 4 to 5 average servings be given for No. 2 can—other sizes in proportion.

Juices

Juices, Sweetness:

UNSWEETENED for such juices.

SUGAR ADDED, DEXTROSE ADDED, etc., when such is case.

Juices, Quantity.—When quantity is declared in terms of average servings, that 3 to 4 average servings be declared for the No. 2 can—other can sizes in proportion.

Orange Juice Variety.—Recommended that the variety of orange juice be declared if distinctive, important and practicable.

The Committee recommended the withdrawal of present recommendations of maturity statements on labels for green and wax beans because of the lack of agreed upon measurement methods for the maturity of these products.

Fred A. Stare tendered his resignation as chairman because, as he said, he had disqualified himself by his retirement from the canning industry. His resignation was accepted with expressions both of thanks and of regret.

The Committee recommended to the Board the passage of the following resolution:

WHEREAS, It is important both to the consumer and to the industry that consumers be provided with specific and adequate information about canned foods,

BE IT RESOLVED, That the prominent use by canners and distributors of the voluntary labeling recommended by the Labeling Committee and approved by the Board of Directors and by the Distributors' Advisory Committee, be encouraged by the Labeling Division in every proper and practical manner.

meeting, each Laboratory reported on each project, definitely stating what was accomplished and how much time was actually spent. This gives the Committee and the Association members access to very definite information on the expenditure of time by both Laboratories and enables a proper evaluation of the importance of the work we are doing in many diverse fields.

We have still ahead of us the proper distribution of our expenses to these various projects. It is not the desire of the Committee to embark on any bookkeeping program that will prove burdensome, but we do feel that with a little additional work on the part of the Directors and their staffs we will be able in another year to state within a few dollars exactly how much money was spent on each of the projects.

This Committee and the staffs of both Laboratories are most anxious that the entire membership be informed as to just what work is accomplished during the year, and in an effort to make this information more accessible and readable, the form of the annual report, of which printed copies are available to all members, has been slightly changed this year. Because of our formalizing the projects mentioned above, it is no longer necessary to have the technical type of report that was formerly issued. This has permitted us to include in this annual report, now in your hands, less academic, but we hope more interesting, statements of the work we have been engaged in, and we will be disappointed if all the members do not read this report carefully as we feel sure that they will be well repaid for any time they might put on it. With such a report available, it hardly seems necessary to take the time to describe in any detail the work of the past year.

As has been said before, we must appreciate that the staffs of both Laboratories are available to take care of the unexpected and unusual problems that are apt to arise within any segment of the canning industry, and when they do arise, that they, of necessity, somewhat disturb the pattern of work as contemplated at the beginning of the year. An outstanding example of the services these Laboratories perform under such conditions was the occurrence last summer of a serious problem in the canning of sardines that had halted packing for a considerable period. The Government was involved and we feel that without the prompt cooperation of the Washington Laboratory in getting into this matter serious financial loss would have resulted. However, the staff, did respond promptly, dropping whatever work might have interfered, and through their good services and close cooperation with the

REPORT OF THE COMMITTEE ON SCIENTIFIC RESEARCH

By H. N. Riley, Chairman

The Committee, consisting of E. J. Draper, H. E. Gray, H. J. Humphrey, R. C. Paulus, H. N. Riley, R. E. Sanborn, and G. C. Scott, with J. T. Knowles absent, met in Washington, D. C., on January 14 and 15, with Dr. Cameron, Director of the Washington Laboratories, and H. K. Wilder, representing the Western Branch Laboratories in place of Dr. Russell Esty, who unfortunately was prevented from attending because of illness.

The Committee fully recognizes its responsibility in spending a large part of the N.C.A. budget and throughout the year has given serious consideration to the problems arising in this area. Briefly, we feel that the Committee is responsible to see:

1. That the Association gets full value for the money spent on research and laboratory services;
2. That the laboratories are doing the kinds of work required, and are expending their energies in the proper direction; and
3. That the total cost of this activity is kept in proper proportion to the financial resources and needs of the Association as a whole.

It is the Committee's belief, and we feel that it is the belief of the entire membership, that the Laboratories as constituted are primarily set up for research purposes. By "research" we do not necessarily mean academic research far removed from the immediate problems of the industry, but

rather research on the pressing problems that face all of us from time to time and without the solution of which it would often be difficult for us to remain in business. Over the years the Laboratories have been glad to do whatever incidental service work they could for individual members and there is no disposition to curtail this work, but it must be recognized that this is not the primary responsibility of the Laboratories and the amount of such work must of necessity be kept within reasonable proportions.

During this present year much progress has been made in formalizing the procedure of the Research Committee and of the activities of both Laboratories in an effort to increase the efficiency of the operations and to contribute to a clearer understanding of just how the time and money allotted to this activity is spent. We have not completed our program as yet, but the personnel of both laboratories have shown eagerness to cooperate with the Committee in developing such a program and, because of this cooperation, much progress has been made.

Our first approach, made a year ago, was to clearly delineate the various projects contemplated, setting them forth in writing according to the nature of the work, with an estimate of time in man-hours required to carry out the assignments. Each member of the Research Committee was furnished with a bound copy of such projects and was thus enabled throughout the year to intelligently check progress on the various projects. At the recent

Food and Drug Administration, a solution of the problem was found rather promptly. The value of such service is hard to estimate, and the incident is typical of what service we expect the Laboratories to perform when these unfortunate and unforeseen occasions arise.

After careful evaluation of the work of the past year, the staffs submitted a projected program for 1948 on a project basis. Many of these projects are continuations of projects now under way, some of which will come to completion in the coming year, and some of which will be continued. The importance and magnitude of the work in progress is such that not too much time is available to contemplate undertaking many new ventures. However, a rather serious outbreak of tomato juice spoilage in the East has indicated that we must do considerable work on this product, and this project has been given a priority rating in our contemplated work of the coming year.

We will continue bacteriological studies that are necessary to a better understanding of processing requirements; the cooperation with various other agencies in the studies of insecticides and their residues; whatever food standards work seems to be justified to keep up with the Government's program; cooperation in the nutrition studies that are still under way; microanalytical and quality control work; the field studies which have been of so much service in the East, where we had two mobile bacteriological units in active service throughout the packing season; the processing studies on glass-packed products in cooperation with the Glass Container Manufacturers Institute; the observations on chlorination and its possible effects; and last, but not least, the ambitious program on sanitation that the industry has embarked on for the past three years. In addition, the Laboratory staffs will continue cooperation with the other divisions of the N.C.A. as they have in the past. They have contributed considerable time to helping the Labeling Committee and the Claims Division.

Both staffs will be glad to contribute any service possible to individual canners as they have in the past, but as stated before, it must be recognized that there is a definite limitation as to the amount of time that can be spent in this direction.

With the inflationary pressures that we are all experiencing we recognize that it is not possible to do the same amount of work as was done last year for the same amount of money. However, after consultation with the officers, the Committee feels it to be to the best interest of the Association not to ask for an increased budget this year as compared with last. We are, therefore, planning to carry out our work this year on a total budget of \$283,520, which was the amount allowed us last year, and of which we

actually spent within \$20,000. To do so will require some economies as we must recognize that salaries in the lower brackets will have to be adjusted upward to meet the increased cost of living, for the burden falls hardest on people in these categories. Last year the budget called for a salary expenditure of \$194,000 and \$90,000 for operating expenses. The budget this year will call for \$198,000 for salaries and \$85,000 for operating expenses. It is obvious that with such a program we cannot undertake any new ventures, and it is necessary to scrutinize all expenditures in order to determine whether we can maintain the same degree of service in the coming year as we did in the past under such a program. We are always faced with the financing of unexpected demands for services which must be met. In the past the Laboratories have shown an ability to finance such expenditures within the budget, and it will be necessary for them to be even more resourceful in the coming year should such occasions develop because it must be recognized that there are no cushions in the budget as presented.

Because of the policy adopted by the Committee, it was not possible to allow funds for waste disposal problems which are very pressing in many localities at the present time. It was

felt that such expenditures were hardly a charge on the Scientific Division of the N.C.A., and if it is thought necessary for the Association to spend money in this area, we feel that it should be handled independently of the Laboratory budget. The same is true for a small item of \$2,500 to carry on the cannery lighting fellowship which we absorbed in our budget for last year. This fellowship is at Stanford University, and they are doing very worthwhile work, but we feel that this \$2,500 to continue for another year should be voted by the Association separately from the laboratory budget if the Association so desires. The Research Committee recommends to the Association that this grant be continued.

The physical conditions under which both Laboratories are operating remain as unsatisfactory as they have been in the past, and your Committee and both staffs are hopefully anticipating making definite plans for new quarters for both Laboratories as soon as the Association indicates its willingness to proceed in this direction. Much time and thoughtful effort will have to be put into this plan, and much of this burden will have to be borne by the existing staffs. However, they will be most happy to engage in such an enterprise.

REPORT OF INTERNATIONAL TRADE COMMITTEE

By George W. Foster, Chairman

Your International Trade Committee has had an active year and has undertaken to keep you informed on the many problems and regulations that have arisen in connection with export matters.

The food industry, in which the processors and growers are playing an increasingly important part, is the biggest in the country in respect of the number of citizens affected by it. Food supply has been and will be, for some years to come, the predominant issue in international trade.

Regardless of the fact that American canned foods are not yet generally allocated to fill the gaps in world food needs, this does not change the fundamental that our industry is part of the whole U. S. A. and thus of the world food economy. Year by year a steadily increasing percentage of all fruits and vegetables grown on U. S. farms goes into containers, which means, among other things, that canner-grower relationships are increasingly affected by the world food economy.

Nobody knows what problems the Marshall Plan will precipitate for us nor what it will achieve over what period. But we do know this is a critical year, requiring watchful waiting in anticipation of crucial events ahead.

So soon as the Marshall Plan gets under way, British presently blocked balances will become convertible. Canada is expected to get prompt exchange relief and that market, next in importance to the British, will open up again. By that time, Canada's present adequate canned goods inventory will have worn down very thin. However, much amended and however much watered down the Marshall Plan seems to be scheduled for ultimate adoption by late Spring.

Mexico, Benelux, Sweden, Switzerland—all are expected to take on new life and Latin America will open up its border to more consumer goods because of Europe's first assumed option on all demands for surplus heavy equipment. India is expected to again permit canned food imports. India's requirements for 1948, because of draught and internal disorders, are stated at ten million tons of imported food. There are little food grains and rice available, so what will she do?

Food purchases under the Interim Relief Bill, officially known as the U. S. Foreign Aid Program, is mapped out along the same lines as previous programs, under which the emphasis is placed on the so-called basic commodities such as wheat, fats, oils and milk which, it is assumed, furnish the greatest caloric value that can be obtained per dollar of expenditure. But there is this difference—the latest bill

does provide for use, on this program, of any commodity which the CCC acquires under price support or surplus removal operations if an outlet can be found—at a price equal to the equivalent caloric value of wheat and the CCC will be reimbursed by the Treasury for any such losses up to but not exceeding \$57,500,000.

However, this plan does seem to provide an opening to change the official thinking on what food items are usable and worthwhile in these foreign aid programs, and the trend will continue towards a growing use of processed foods. This will require a selling job and an industry wide backing. Since this is 1948, the official thinking is more susceptible to argument than might otherwise be the case and this problem should be given some solid thought.

With nearly 250 million bushels of American wheat reserved for feed and 150 million reserved for carry-over under the new law we cannot send more grains beyond the current allocations to Europe until after the next harvest. What other available foods are there to supply Europe and Asia?

As a consequence of Congress incorporating in the Anti-Inflation Act at its last special session a provision authorizing the use of price criteria in the licensing of exports either by giving preference among otherwise comparable applications to those which provide for the lowest prices or in exceptional circumstances by fixing reasonable mark-ups in export prices over domestic prices. The Office of International Trade (Department of Commerce) is now taking steps to modify its licensing policy by granting export licenses hereafter on basis of lowest competitive price charged for comparable materials under similar conditions. Effective March first all commodities for Europe and related

areas will be subject to license and it is possible other parts of the world will follow.

The Food and Agricultural Organization has taken over the I. E. F. C. for world-wide allocation of foods in short supply. Nobody knows what items will be added to the "positive" list month by month. Nor can the ultimate powers of FAO over world market be visualized until their program of international operations has been set up.

The ITO will not complete its charter program until the Havana conference is over. It cannot build its administrative organization and attempt its potential activity in world commodity agreements, so-called economic procurement and stabilization of world price levels for some months.

The recent embargo and quota system placed into effect in November furnished striking example of the way Government edicts and regulations can affect our business and the necessity of having some central point where these developments can be digested and summarized from the industry viewpoint and passed along for everyday use. Quick and effective work on the part of Allen Walker resulted in clearing up numerous cars blocked by the Canadian order, resulting in N.C.A. receiving the congratulations of the State Department and from Senators and Congressmen for his successful efforts.

Inasmuch as all processors and their growers cannot help but be affected by world-wide food markets, it seems to me that the N.C.A., with its established prestige and enviable record, should be the very last trade organization to withdraw, even temporarily, from actual participation in the job of keeping pace with international affairs. However, the budget position being as it is I hope this service can be resumed in another year.

REPORT OF SIMPLIFICATION OF CONTAINERS COMMITTEE

By Ivan Moorhouse, Chairman

Your committee presented a proposal at Chicago last November, and the Board asked further work.

We have made further extensive studies, consulted with canners, and had a further meeting. We have a revised proposal. But before getting into detail, let's peg some principles:

1. For 15 years there has been fairly wide agitation by consumers, by consumer groups, and by Government against the use of too many diverse can sizes for the same product. In 1935 and 1937 there were bills in Congress to limit can sizes by statute—to freeze everything. Out of this grew our work with the Bureau of Standards, a voluntary program.

2. During the war, we had Order M-81. Many in Government now

think it should be continued to save a significant amount of tin. But wholly apart from tin conservation, we must face the fact that: *Either the industry works out this problem by voluntary action, or else it will be done by a freezing statute.*

3. We have the opportunity to continue work with the Bureau of Standards. But we cannot do so unless we show progress, unless we go forward, in the direction of simplification. This will leave room for future development—it will leave discretion in the industry. If we don't go forward, I think the Government, urged by consumers, will act.

Against this background, here are the additional proposals worked out by the committee:

The Committee, having considered the subject of revising the voluntary

program of can standardization covering cans for fruits, vegetables and juices submits to the Board for its approval and for transmission to the National Bureau of Standards the following proposal to be promulgated as a revised Simplified Practice Recommendation.

Can Name	Dimensions	Products*
2Z Mushroom.....	202x204	Mushrooms
.....	202x214	Baby Foods
6Z.....	202x308	Juices (except Pineapple Juice), Mushrooms, Tomato Paste
.....	202x314	Citrus and Grape Juice
4Z Pimiento.....	211x200	Olives, Pimientos
.....	211x210	Baby Foods, Dry Beans, Spaghetti
4Z Mushroom.....	211x212	Mushrooms
8Z Short.....	211x300	Dry Beans, Tomato Sauce
8Z Tall.....	211x304	Fruits, Juices, Olives, Soups, Spaghetti, Vegetables
No. 1.....	211x400	Dry Beans, Kraut Juice, Mushrooms, Soups, Vegetables
211 Cyl.....	211x414	Juices, Pineapple, Prunes (dried)
Pt. Olive.....	211x600	Olives
7Z Pimiento.....	300x206	Pimientos
.....	300x308	Dry Beans
8Z Mushroom.....	300x400	Mushrooms
No. 300.....	300x407	Asparagus, Citrus Segments, Cranberries, Dry Beans, Juices (except Pineapple Juice), Pimientos, Spaghetti
No. 1 Tall.....	301x411	Fruits (except Pineapple), Vegetables, Olives
303.....	303x406	Dry Beans, Fruits (except Pineapple), Hominy, Soups, Vegetables
303 Cyl.....	303x509	Soups
No. 1 Flat.....	307x203	Pineapple
Kitchenette.....	307x214	Dry Beans
No. 2 Vac.....	307x306	Vegetables (vacuum packed)
No. 95.....	307x400	Dry Beans, Snap Beans, (Asparagus style)
No. 2.....	307x409	Dry Beans, Fruits, Hominy, Juices, Vegetables
Jumbo.....	307x510	Asparagus, Dry Beans, Mushrooms
No. 2 Cyl.....	307x512	Juices (except Pineapple Juice), Soups
Qt. Olive.....	307x704	Olives
No. 1 1/2.....	401x207.5	Pineapple
No. 2 1/2.....	401x411	Dry Beans, Fruits, Hominy, Kraut Juice, Olives, Pimientos, Soups, Vegetables
No. 3 Vac.....	404x307	Sweet Potatoes
No. 3 Cyl.....	404x700	All products (except Pineapple)
No. 10.....	603x700	All Products

*Corn on Cob: The nature of the product does not lend itself to can standardization.

Annual Reports Mailed

Copies of the Secretary's Annual Report for 1947 and the Annual Report of the Research Laboratories (1947) were distributed at the Convention and an additional copy has been mailed to each canner-member.

CUMMING ELECTED PRESIDENT, McGOVERN, FIRST VICE PRESIDENT—ALL OTHER OFFICERS CONTINUED IN OFFICE

Howard T. Cumming, president of Curtice Brothers Co., Rochester, N. Y., was elected president of the National Cannery Association for the coming year at the opening general session of the N.C.A.'s 41st Annual Convention held in Atlantic City, N. J. Mr. Cumming succeeds Emil Rutz, president of Schuckl & Co., Inc., Sunnyvale, Calif.

Other officers elected at the same session include: First vice president—John F. McGovern, Minnesota Valley Canning Co., Le Sueur, Minn.; second vice president—Alfred W. Eames, California Packing Corp., San Francisco, Calif.; secretary—Carlos Campbell, Washington, D. C.; and treasurer—Frank E. Gorrell, Washington, D. C. Mr. Eames, Mr. Campbell and Mr. Gorrell continue in office, all three having held similar positions during 1947. Twenty-five directors of the Association also were elected and 46 members of the board were held over from 1947.

Mr. Cumming, for many years has been a prominent figure in the canning industry. He becomes the 36th president of N.C.A. during its 41 years of existence. He served during the past year as first vice president of the Association and has been a director and is a member of the N.C.A. Administrative Council. Mr. Cumming became particularly well known to the food industry during the war for his outstanding services as chairman of the government's Canned Fruit and Veget-

table Advisory Committee, which was set up to consult with government officials concerning price controls, food rationing, procurement of food for the armed services, and other wartime problems.

Mr. McGovern, the new first vice president, has held a number of committee posts with the canning trade organization. He has become prominently identified for his services as chairman of the N.C.A. Legislative and Manpower Committees. He has been an official in the Minnesota Valley Canning Co. for a number of years.

Mr. Eames, the N.C.A. second vice president, has been identified with the canning industry for many years and is president of the California Packing Corp., San Francisco, Calif. He has served in numerous capacities with the N.C.A. and the canning industry, and is a past president of the Cannery League of California.

Both Mr. Campbell and Mr. Gorrell have been very active in the canning industry. Mr. Gorrell was founder of the N.C.A. and served as its secretary for 38 consecutive years after which he voluntarily withdrew as secretary and became the organization's treasurer. Mr. Campbell at that time was elected to succeed Mr. Gorrell as secretary of the N.C.A.

The following directors were elected or were held over and will serve the Association during the term indicated:

REPORT OF THE CONVENTION COMMITTEE

By William Kinnaid, Chairman

Your Convention Committee made certain recommendations at the last Board meeting, in Chicago, concerning details of this Convention, which the Board members approved. These were (1) That the Association offices for the Convention period be established at Convention Hall this year, rather than at a headquarters hotel, and (2) That the N.C.A. Trailer Field Laboratory Unit be placed on display in the Exhibit Hall.

Both of these recommendations have been carried out. The headquarters offices, the office of the Laboratory staff, Press and Mimeograph Room, office of the Fisheries Division, and other meeting and conference room facilities have been set up in the area just behind the stage of the Ballroom, second floor of Convention Hall. We urge the members to make full use of all these facilities. The Trailer is on display in a special booth among the Machinery and Supply Exhibits and we feel that it will result in great credit to the Association for visitors

to know that this industry operates on so scientific a basis.

At the last Director's meeting the President and Secretary were authorized to select the 1949 and 1950 Convention dates and places whenever it seemed expedient to do so. It was found expedient to make this decision for next year's Convention during this past month. Investigation disclosed that neither Chicago nor New York could accommodate next year's Convention, but that Atlantic City again would be able to furnish the facilities required by all the participating associations. Accordingly, it has been agreed with the Atlantic City Convention Bureau that the 1949 Convention will be held here, and the third week of January, 1949, has been set aside for this purpose. The Secretary has been empowered to make the allocations of hotels, and it is understood that the Friday-to-Friday, one-week Convention period recommended by the Committee and approved by the Board, will be observed by all of the associations, rather than to stagger the meeting period over two weeks.

N.C.A. Board of Directors

Directors Elected to Fill Unexpired Terms

Edward E. Burns, Alton Canning Co., Alton, N. Y. (Term expires 1949.)
Joseph M. Steele, Steele Canning Co., Springdale, Ark. (Term expires 1949.)

Directors Elected for One Year

Scott A. Holman, Libby, McNeill & Libby, Chicago, Ill.
Fred E. Jewett, G. S. & F. E. Jewett, Norridgewock, Maine.

Directors Elected for Two Years

Henry W. Chavis, Ames Canning Co., Ames, Iowa.
Peter J. Naeye, Marion Canning Co., Inc., Marion, N. Y.
James M. Shriver, The B. F. Shriver Co., Westminster, Md.

Directors Elected for Three Years

William R. Benner, Streater Canning Co., Streater, Ill.
Gordon Bowman, Bowman Apple Products Co., Mt. Jackson, Va.
Herbert C. Davis, Terminal Island Sea Foods, Ltd., Terminal Island, Calif.
Clinton W. Davis, Jr., Portland Packing Co., Portland, Maine.
E. J. Draper, Treesweet Products Co., Santa Ana, Calif.
Alfred H. Funke, P. J. Ritter Co., Bridge-ton, N. J.
L. M. Jones, Washington Cannery Coop., Vancouver, Wash.
Ernest E. Killion, Jr., Vincennes Packing Corp., Vincennes, Ind.
William C. Kunzman, Kuner-Empson Co., Brighton, Colo.
Harold J. McCarty, Brownsville Canning Co., Brownsville, Wis.
Robert W. Mairs, H. J. McGrath Co., Baltimore, Md.
F. M. Moss, Idaho Canning Co., Payette, Idaho.
C. L. Rogers, Point Adams Packing Co., Hammond, Ore.
Robert D. Schenkl, Greencastle Packing Co., Inc., Greencastle, Pa.
Howard Sweett, Besco Products Co., Orlando, Fla.
Ronald Wadsworth, California Packing Corp., Ogden, Utah.
Norman L. Waggoner, Santa Clara Packing Co., San Jose, Calif.
Edward B. Woodworth, Hawaiian Pineapple Co., San Francisco, Calif.

Directors Whose Terms Held Over

H. E. Apple, Jr., Birds Eye-Snyder Division of General Foods Corp., Rochester, N. Y.
C. R. Barnhart, Winorr Canning Co., Circleville, Ohio.
Luke F. Beckman, The Beckman & Gast Co., St. Henry, Ohio.

J. Logan Bloodworth, Cherokee Products Co., Haddock, Ga.
 H. D. Booker, H. D. Booker, Lottsburg, Va.
 Fred C. Bush, Bush Bros. & Co., Dandridge, Tenn.
 Henry P. Cannon, II, H. P. Cannon & Son, Inc., Bridgeville, Del.
 A. L. Cramer, Engelman Products Co., Elsas, Texas.
 H. K. Defendorf, Kauai Pineapple Co., Ltd., Kalaheo, T. H.
 Roy W. Demeritt, The Demeritt Co., Waterbury, Vt.
 Edward H. Dunlap, Plymouth Canning Co., Inc., Plymouth, Ind.
 Wm. R. Eddington, Eddington Canning Co., Springfield, Utah.
 Garnett R. Fleming, Morristown Canning Co., Morristown, Ind.
 William H. Foster, Foster & Wood Canning Co., Lodi, Calif.
 Robert A. Friend, Friend Bros., Inc., Melrose, Mass.
 Howard J. Fuhremann, Fuhremann Canning Co., Lanark, Ill.
 T. O. Goeres, Lodi Canning Co., Lodi, Wis.
 Clark Hagan, Sac City Canning Corp., Sac City, Iowa
 Henry McK. Haserot, Hawaiian Canners Co., Ltd., Kapas, T. H.
 Earle Johnson, Gerber Products Co., Fremont, Mich.
 H. E. Kelley, H. E. Kelley & Co., New Church, Va.
 Leo T. Kreielsheimer, Kadiak Fisheries Co., Seattle, Wash.
 Steve Lange, Owatonna Canning Co., Owatonna, Minn.
 F. J. Leard, Custom House Packing Co., Monterey, Calif.
 R. G. Lucka, California Packing Corp., San Francisco, Calif.
 R. E. McCaughern, Starr Fruit Products Co., Portland, Ore.
 Julian McPhillips, Southern Shell Fish Co., Inc., Harvey, La.
 L. E. Neel, Turlock Cooperative Growers, Modesto, Calif.
 K. H. Nelson, Otee Food Products Co., Nebraska City, Nebr.
 J. B. Park, Brandywine Mushroom Corp., West Chester, Pa.
 Robert Payne, Eau Claire Packing Co., Eau Claire, Mich.
 Albanus Phillips, Jr., Phillips Packing Co., Cambridge, Md.
 M. B. Pike, Holmes Packing Corp., Eastport, Maine.
 L. L. Recker, Adams Packing Coop., Canning Div., Auburndale, Fla.
 R. D. Robinson, Dr. P. Phillips Canning Co., Orlando, Fla.
 Walter Scheid, Loudon Div. of Standard Brands, Napoleon, Ohio
 G. C. Scott, Minnesota Valley Canning Co., Le Sueur, Minn.
 Elton S. Shaw, Sunny Slope Farm, San Jose, Calif.

Albert T. Smith, Smith Canning Co., Clearfield, Utah.
 O. E. Snider, Blue Lake Packers, Inc., Salem, Ore.
 T. C. Tait, Swift & Co., Chicago, Ill.
 Marcus L. Urann, National Cranberry Association, Hanson, Mass.
 Alan R. Warehime, Hanover Canning Co., Hanover, Pa.
 E. J. Watson, PictSweet Foods, Inc., Mt. Vernon, Wash.
 L. J. Weix, Oconomowoc Canning Co., Oconomowoc, Wis.
 Robert Williams, Stokely Foods, Inc., Oakland, Calif.

1948 FINANCE COMMITTEE

Also approved at the closing session of the Convention on Wednesday was the personnel of the Finance Committee for 1948. As announced by President Cumming, it is as follows:

Emil Rutz, Chairman, Schueckl & Co., Sunnyvale, Calif.
 H. K. Bachelder, Ladoga Canning Co., Indianapolis, Ind.
 H. J. Barnes, Kaysville Canning Corp., Kaysville, Utah.
 E. B. Cosgrove, Minnesota Valley Canning Co., Le Sueur, Minn.
 H. T. Cumming, Curtice Bros. Co., Rochester, N. Y.
 S. B. Cutright, Illinois Canning Co., Hoopeston, Ill.
 Clinton W. Davis, Portland Packing Co., Portland, Maine.
 Ralph O. Dulany, J. H. Dulany & Son, Fruitland, Md.
 A. W. Eames, California Packing Corp., San Francisco, Calif.
 A. T. Flynn, Reid, Murdoch & Co., Chicago, Ill.
 William A. Fries, Hungerford Packing Co., Hungerford, Pa.
 H. K. Funderburg, Rock Valley Canning Co., Belvidere, Illinois.
 Frank Gerber, Gerber Products Co., Fremont, Mich.
 Walter L. Graefe, Pomona Products Co., Griffin, Ga.
 H. E. Gray, Barron-Gray Packing Co., San Jose, Calif.
 Frank A. Harding, Wm. Underwood Co., Watertown, Mass.
 G. Sherwin Haxton, Haxton Foods, Inc., Oakfield, N. Y.
 Scott A. Holman, Libby, McNeill & Libby, Chicago, Ill.
 Marc C. Hutchinson, Michigan Fruit Canners, Inc., Fennville, Mich.
 H. F. Krimendahl, Stokely-Van Camp, Inc., Indianapolis, Ind.
 William C. Kunzman, Kuner-Empson Co., Brighton, Colo.
 C. E. Lindsey, Lakeland Highlands Canning Co., Highlands City, Fla.

Carl N. Lovegren, United States Products Corp., Ltd., San Jose, Calif.
 H. E. MacConaughy, Hawaiian Pineapple Co., Ltd., San Francisco, Calif.
 John F. McGovern, Minnesota Valley Canning Co., Le Sueur, Minn.
 Art Oppenheimer, Marshall Canning Co., Marshalltown, Iowa.
 Robert C. Paulus, Paulus Bros. Packing Co., Salem, Ore.
 M. C. Peters, Floridagold Citrus Corp., Lake Alfred, Fla.
 E. N. Richmond, Richmond-Chase Co., San Jose, Calif.
 H. N. Riley, H. J. Heinz Co., Pittsburgh, Pa.
 R. L. Smith, Kuner-Empson Co., Brighton, Colo.
 J. B. Weix, Oconomowoc Canning Co., Oconomowoc, Wis.
 Oliver G. Willits, Campbell Soup Company, Camden, N. J.
 Paul H. Wolf, Roach-Indiana Corp., Gwynneville, Ind.

ACSRS Holds Annual Dinner

At the annual dinner and meeting of the Association of Cannery State and Regional Secretaries held on January 18 in Atlantic City, N. J., plans were discussed for having other meetings of the ACSRS at the same time during the year that the N.C.A. Board of Directors meet.

Host for the dinner was Carlos Campbell, Secretary of the National Cannery Association. Special guests included Howard T. Cumming and John F. McGovern, as well as a number of N.C.A. staff members.

N.C.A. Guest Appearances

President Howard T. Cumming made two guest appearances as speaker during the Annual Convention. The first of these was before the National Kraut Packers Association at Hotel Traymore on Tuesday, January 20; the second at the weekly luncheon of the Atlantic City Kiwanis Club, at Hackney's Restaurant, Thursday, January 22.

To the kraut packers, Mr. Cumming spoke on relations between trade associations and government agencies. The Kiwanians were told what the canning industry is doing for the consumer.

Happer Payne, Assistant Secretary and Director of the N. C. A. Labeling Division, spoke at the Tuesday luncheon of the Label Manufacturers Association, at Haddon Hall, on the Association's labeling program.

Standards

Canners Prepare for Corn and Bean Standards Hearings

Following preliminary discussions last fall in Chicago, and recently at the Atlantic City Convention, corn canners and bean canners met at Association headquarters on January 26 and 27 in a Post-Convention session, to organize data for the proposed hearings on the Food and Drug standards for canned corn and beans to be held in Washington, D. C., this spring.

During the first portion of the corn meeting on Monday, canners graded samples of whole kernel corn for maturity. The results of this grading will be used to determine whether the alcohol insoluble solids test is a valid test for maturity, and, if so, at what A.I.S. level the dividing line between standard and substandard whole kernel corn should be fixed.

Definitions of the various types of canned corn for the standard of identity was the principal problem discussed by the corn canners. It was agreed that further work was needed to determine whether such factors as consistency and kernel characteristic in cream style corn should be included in the standard of identity.

A report of the corn meeting will be mailed later by the N.C.A. to all corn canners together with a request for further information on certain points involved in the determinations on standards.

The bean canners met on Tuesday to lay final plans for the rehearing on bean standards which will probably be held some time in March. The witnesses who will testify on each point were designated, and it was agreed that all those who plan to appear at the hearing would arrive in Washington well in advance of the hearing date to coordinate the proposed testimony.

INDIVIDUAL LICENSES

(Concluded from page 67)

There will be no change in the forms and procedures required for obtaining licenses for shipments of goods on the positive list. The positive list is a list of commodities in short supply for which export licenses are required to all destinations.

Department of Commerce officials emphasized that the new regulation does not mean that an embargo will be

placed on any particular goods going to particular countries. They explained further that it is the policy of the United States Government to foster a healthy and stable trade relationship which can contribute to a balanced and expanding world economy.

The new licensing policy has been established, it was stated, to insure a careful programming of the supply of essential goods to areas of greatest need, and to limit the shipment of commodities which can make no contribution to world recovery.

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